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THE

AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

MEDICINE AND SURGERY.

EDITED BY

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THE AMERICAN PRACTITIONER.

JANUARY, 1873.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

REMARKS ON STETHOSCOPY AND AUSCULTATION.*

BY AUSTIN FLINT, M. D.,

Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue Hospital Medical College.

Laennec, in entitling his great work "A Treatise on Mediate Auscultation," implied the need of an instrument to conduct to the ear intra-thoracic sounds. In view of the discovery of auscultation, together with the extent and completeness of Laennec's observations, it would be ungracious and ungrateful to dwell upon aught which he failed either to observe or appreciate. One can not, however, help being surprised that he almost overlooked immediate auscultation. Not a few of those practitioners who at the present time practice auscultation are content with the application of the ear to the chest, never using a stethoscope. Undoubtedly immediate auscultation answers all practical purposes in many cases; yet without the aid of the stethoscope an exploration

* This article embodies substantially remarks made at a reunion of the New York Library and Journal Association.

of the chest can not be complete, and is often unsatisfactory. The ear can not be applied to all parts of the chest. It is difficult or impossible without the stethoscope to interrogate separately circumscribed sections of the pulmonary organs; and for the localization of cardiac murmurs an instrument which limits the source of conducted sounds within a small area is highly useful, if not indispensable. For these and other reasons stethoscopy must be practiced by one who aims to become an accomplished auscultator. Assuming this, the kind of stethoscope to be preferred becomes an important topic.

The stethoscope devised by Laennec is now merely an object of curiosity. It would seem as if he took for his model the rolled quires of letter-paper which was the instrument improvised when the idea of an acoustic exploration of the chest entered his mind. Laennec's stethoscope was a perforated wooden cylinder about an inch and a half in diameter and nearly two feet in length, the pectoral end having a bell-shaped excavation for pulmonary signs, the excavation being closed with a wooden plug for the sounds of the heart. It was made to separate in the middle for the convenience of carrying it in the pocket. I am so fortunate as to have a stethoscope of this description which once belonged to Laennec himself. It was given to me by a former colleague, Prof. Choppin, of New Orleans, to whom it was presented by one who received it from the hands of Laennec. It is the more valuable as a relic from the fact that it was undoubtedly not only owned but made by Laennec. He was accustomed to make stethoscopes for himself and his friends, and the instrument which I have bears intrinsic evidence of its having been the work of an amateur turner. Stethoscopes made in exact imitation of the instrument devised by Laennec were imported into this country with the study of auscultation, and they were used by those who were the first to appreciate the importance of the discovery. Soon, however, various

improvements were made in the size, form, and style of the instrument, the material used being generally wood; and at length the different kinds of stethoscopes were extremely numerous, almost every one who devoted much attention to the study of auscultation appearing to feel that he was bound to introduce some new modification. There would be no profit in undertaking to describe the great diversity of wooden stethoscopes since Laennec's day. All are destined to become obsolete; and at some remote period in the future, should any one of them by chance turn up, its use will be less obvious than the surgical instruments found among the ruins of Herculaneum.

The flexible stethoscope devised by the late Dr. Pennock was the forerunner of a vastly more important improvement. Pennock's instrument consisted of a metallic bell-shaped pectoral extremity, joined by a flexible tube to a tube of metal, fitted to be introduced into the meatus auditorius. This instrument had certain manifest advantages; but the vastly more important improvement referred to is the binaural stethoscope devised by the late Dr. Cammann. This instrument is now so well known in this country that a description of it would be superfluous. It has several great advantages over other stethoscopes. The greatest of these is the superiority in conduction. Evidently this depends on the simultaneous transmission of sounds into both ears. Observation shows this; the rationale I shall not attempt to explain. The lesser advantages are important—namely, the exclusion of extraneous sounds, the tubes closing both ears, and the facility with which it is used, the eyes of the auscultator being directed to the chest of the patient. Owing to these advantages I have not the least doubt that this instrument will eventually supersede all the stethoscopes hitherto in use.

In remarking on the merits of the binaural stethoscope I feel that I have a right to speak with some authority. The instrument was perfected and given to the profession in 1854.

I began to use it at once. During the winter of 1854–5, when I was connected with the University of Louisville, I was engaged in the analytical study of the signs obtained in health. I devoted a portion of each day to the examination successively of members of the medical class having well-formed and healthy chests, who were complaisant enough thus to co-operate with me in this labor. My explorations were made with Cammann's instrument, as well as with a wooden stethoscope, and with the application of the ear immediately to the chest. Many practitioners who were members of that class will recall a prolonged *séance*, during which the respiratory, vocal, and whispering signs on different parts of the chest were observed, compared, and noted in writing. These studies were preliminary to writing my work on the Physical Exploration of the Chest, with Reference to the Diseases affecting the Respiratory System. In that winter I began also to use the instrument in cases of disease at the Louisville Marine Hospital. I have used it daily since that time both in hospital and private practice. Moreover, I have observed its use in the hands of my private pupils, the number of whom will not fall much short of one thousand. I mention these things in support of my claim to have had abundant opportunity to form a just estimate of the binaural stethoscope.

It is remarkable that Cammann failed to appreciate the full value of his instrument. He advised its use only in certain cases in which the sounds were too weak to be otherwise satisfactorily observed. He advised against its habitual use in auscultation. Directly after his death I was appointed his successor in the Demilt Dispensary. My first act was to make a requisition for a binaural stethoscope. In fact, Cammann seldom used the instrument, the invention of which will render his name always memorable, as I have learned from his intimate friend and associate, Dr. Leaming. He could not therefore have known the usefulness of the instrument,

because its habitual use for a certain period is necessary in order to overcome a difficulty which is at first experienced. This difficulty consists in a humming sound which the instrument itself occasions. After some practice this sound ceases to divide the attention with the intra-thoracic sounds. It is completely disregarded, and no longer causes any difficulty. My experience in private teaching has led me to expect always that at the beginning of a course nearly all the members of the class will prefer to apply the ear to the chest rather than to use Cammann's stethoscope; but before the course is ended the difficulty is to prevent them from using the stethoscope too constantly to the exclusion of immediate auscultation. This difficulty is one of which every one must become sensible after having become accustomed to the use of the stethoscope.

I believe Cammann shared in an opinion which I have heard expressed by others—namely, that the habitual use of his instrument would impair the ability to auscultate without it. The idea is that the acuteness of hearing is diminished by its use. There is no ground for this opinion, but I can readily understand how it is formed. The sounds conducted by the instrument are so much more intense; they are brought out, as it were, in such bold relief, that in contrast as heard with the unaided ear the sounds seem comparatively feeble and indistinct. There is in addition a reason for the relative unsatisfactoriness of immediate auscultation after one has become habituated to the use of the stethoscope—practice of auscultation without it is apt to be neglected. Hence in recommending its use the importance of keeping up the exercise of auscultation with the ear applied to the chest is to be enjoined. To object to the stethoscope on account of the contrast with immediate auscultation seems to me as absurd as would be the disparagement of the microscope because this instrument makes evident the inferiority of vision with the naked eye. And there is no more ground for apprehension that with proper exercise the ear will be incapacitated for hearing

auscultatory sounds by the constant use of the stethoscope than that the ability to distinguish gross appearances of disease will be affected by microscopical studies.

After what has been said it is quite needless for me to add that I am a zealous advocate of the binaural instrument in the practice of stethoscopy. I meet often with practitioners who declare that they have made trial of it, and prefer some one of the old-fashioned stethoscopes, or the ear alone. Whenever I am told this I know that the trial has been too short to warrant a fair judgment. Let any one who is conversant with auscultatory signs continue to use the instrument for a few weeks or months, resolved to avail himself of whatever advantages it may have, and its use will never afterward be abandoned. To the novitiate in auscultation it is of great value, enabling him to acquire a practical knowledge of auscultatory signs with much greater facility than by the application of the ear to the chest.

It is important to mention a reason other than lack of sufficient trial for the failure of many to appreciate the binaural stethoscope. It is that many of the instruments sold are defective in some of the essential points relating to their construction. There are several nice points which all instrument-makers do not understand, and hence many worthless instruments are sold. It may be of use for me to indicate the essentials of a good instrument. The flexible part should be quite flexible, allowing the pectoral end to be moved freely, without any unpleasant pulling of the ear tubes. The movements of this part should also be without noise. The pectoral end should be neither too large nor too small. If too large, in thin patients the edges will not be every where in contact with the integument, which is indispensable. If too small, the area whence sounds are received is not large enough, and the exploration of the entire chest is unduly tedious. The tubes should be unobstructed. It is only necessary to obstruct the tubes leading to one ear to perceive that the

conduction is chiefly made by the column of air within them. The aural ends should have the proper curves adapting them to the meatus auditorius; and lastly, the ivory or rubber knob should not be too large on the one hand, nor on the other hand so small as to enter too far into the meatus; the latter defect renders the use of the instrument uncomfortable and even painful. With no disposition to make an invidious distinction among instrument-makers, I am bound, in behalf of the importance of having good instruments, to say that those made by Tiemann & Co. are almost invariably free from defects, whereas it has happened to me to see more or less of defect in many instruments made elsewhere. I can only account for this by the fact that the first instruments were made by Tiemann & Co. under the personal supervision of Cammann, who impressed the importance of attention to all the nice points involved in their construction.

There have been of late years many efforts to improve Cammann's stethoscope. One improvement which has been suggested is the addition of a piece of parchment stretched over the pectoral end. The conduction seems to be somewhat increased by this addition. Another is surrounding the pectoral end with an India-rubber ring, which extends a little beyond the margin. This originated with Dr. Snelling, of this city, and is an improvement in so far as it facilitates the closeness of the contact of the pectoral end with the integument. Alison has devised a modification, converting the instrument into what he calls the "differential stethoscope." The modification consists in having for each of the tubes introduced into the ears a separate pectoral extremity. Instead of the sounds from one part being conducted into both ears, those of two parts are received separately, but synchronously, the sounds from one part into one and from the other part into the other ear; that is, the sounds from two situations are perceived simultaneously. The increased conduction due to the same sounds being transmitted into both ears at once is

lost in the differential stethoscope. Moreover, it is based on a false principle—namely, that two sounds can be best compared when heard together—that is, at the same instant—whereas a little reflection will satisfy any one that two sounds can be best compared with each other when heard in succession. If one desires to compare two musical notes, they should be heard in alternation, not in combination.

With respect to another proposed improvement suggested by Alison—namely, placing between the chest and the pectoral end of the stethoscope an India-rubber bag filled with water, which he calls a "hydrophone." Five minutes' trial suffices to show that the only effect is to diminish in a certain degree the conduction.

In concluding this article it will perhaps not be deemed amiss to present, with brief comments, some considerations pertaining to the study of auscultation, which are applicable alike to the practice of stethoscopy and the application of the ear to the chest. The considerations which I shall present will have reference to the following inquiry, which, it may be supposed, arises in the minds of all those who aim to acquire practical proficiency in the employment of this method of physical exploration: What are the requirements for success in the practice of auscultation?

1. The first of the several requirements which I shall enumerate is the study of the healthy chest. The auscultatory phenomena in health forms a point of departure for the study of the morbid signs ascertained by auscultation. Some of the more important of the latter are abnormal modifications of normal sounds. How is it possible for the former to be studied until the latter are known? In the category of abnormal modifications of normal sounds are the bronchial, the broncho-vesicular, and the cavernous respiration, increased vocal resonance, bronchophony, amphoric voice, and pectoriloquy; increased bronchial whisper, whispering bronchophony, cavernous whisper, whispering pectoriloquy, and

amphoric whisper. Besides, the adventitious sounds, or râles, can not be fully appreciated without a previous acquaintance with the signs of health. With the several points of disparity between the two sides of the chest, as regards the auscultatory signs of health, one must become practically conversant in order to judge accurately of morbid differences. One of the greatest of the difficulties in effective practical teaching I have found to be an inability to enforce sufficiently the study of the healthy chest as an essential prerequisite for entering on the study of the signs of disease. The more complete the preliminary acquaintance with healthy signs the greater the facility with which a knowledge of the signs of disease is obtained; and indeed without the study of the former the latter can never be fully learned.

2. A requirement for notable success in the practice of auscultation is that knowledge of the signs which is based on an analytical study of them. The study which I would characterize as analytical resolves the signs severally into their differential characters, derived chiefly from points of difference pertaining to intensity, pitch, and quality of sounds. A fuller exposition I have given elsewhere.* If the signs are known only by their resemblance to certain sounds, or simply by a recognition of their peculiarities without analysis, there can not be that fullness and reliability of knowledge which is derived from an acquaintance with their distinctive characters obtained by analytical investigation. For example, suppose the auscultator to have only this general idea of the sign called *bronchial respiration* — it is the sound produced by blowing through a tube. Such an idea must be incomplete and unreliable as compared with the knowledge of the sign based on the following distinctive characters: an inspiratory sound of variable intensity, high in pitch and tubular in quality, followed by an expiratory sound, prolonged, more intense, still higher in pitch, and of the same quality. Take as

* Physical Exploration of the Chest, etc.

another example the *cavernous respiration*, and suppose it to be defined a sound like that caused by air passing into and out of a cavity of greater or less size. With such a definition it is not strange that the bronchial and cavernous respirations are confounded, and that the existence of each as a separate sign has been denied. Let, however, the cavernous respiration be defined as consisting of a low-pitched, non-tubular, and non-vesicular sound, followed by an expiratory sound still lower in pitch and non-tubular in quality; there need never be difficulty in discriminating it from the bronchial respiration.

3. Another requirement is such a degree of familiarity with the distinctive characters of the different signs that they are recognized without mental effort. The signs should be as familiar as household words, so that in the practice of auscultation there is nothing for the mind to do but to reason and draw conclusions. The requisite familiarity is to be acquired by frequently repeating and dwelling sufficiently on the characters which distinguish the different signs. In this respect a practical knowledge of auscultation is acquired in the same way as a foreign language. The auscultator should be conversant with the signs as the linguist is conversant with the words of the language which he has studied with success. If this comparison should seem to represent the study of auscultation as a large undertaking, let it be considered how limited is the vocabulary, all the auscultatory phenomena of disease being embraced in only twenty-four signs. Contrast the labor of becoming as familiar as possible with the distinctive characters and meanings of these twenty-four signs with that of acquiring a mere smattering of any foreign lauguage!

4. Another requirement is that all the varied abnormal physical conditions which are incident to the different intrathoracic diseases should be fully understood. The physical signs represent not diseases, but the altered physical conditions belonging to diseases. The successful auscultator must

know what the numerous abnormal conditions are which give rise to the morbid auscultatory phenomena, else he is certainly not prepared to comprehend the significance of the latter. There are two points of departure for exercises in the study of auscultation, namely: *first*, from the signs, their distinctive character, and their significance; *second*, from morbid physical conditions, and their representative auscultatory phenomena. It is a highly useful exercise to enumerate often all the abnormal conditions incident to different diseases in connection with the signs to which they give rise.

5. The ability to abstract the mind from perceptions and thoughts other than those connected with the observation of auscultatory phenomena is another requirement. Different minds differ as regards the power of directing the attention exclusively for a certain time to the sounds obtained by auscultation. Herein is one reason for the difference among different persons as regards the facility with which a practical knowledge of physical signs is obtained. The ability to concentrate the attention exclusively upon auscultatory phenomena, if deficient, may be acquired by practice.

6. For the successful application of auscultation to diagnosis a tendency to premature conclusions is to be held in restraint. If an opinion be formed of the nature and seat of the disease prior to the physical exploration, the auscultator is apt to strive by means of the latter to corroborate the opinion to which the mind is already committed. This involves a bias which may affect not only the reasoning but even the direct observation of the auscultatory phenomena. He who would practice auscultation with success should be careful to resist a natural inclination to anticipate the result of the physical exploration, deferring his conclusions until all the facts are obtained.

Some of my readers may perhaps be surprised that I do not include in the foregoing list knowledge of the mechanism of the auscultatory signs. This is not an omission through

inadvertency. In the first place, the study of the laws of technicalities of acoustics is no more needed for the practice of auscultation than for either learning to play on any musical instrument or appreciating the performances of others. In the second place, however desirable it may be to understand the manner in which auscultatory signs are produced, ignorance or error in this regard does not affect the practical value of auscultation. The significance of signs is in no measure dependent on our ability to explain correctly the mechanism of their production. To undertake to determine on principles of acoustics the phenomena to which *a priori* certain physical conditions should give rise, or, on the other hand, to infer causative conditions from the characters of the signs, would be as likely to lead to false as to true conclusions. Accuracy and skill in the practice of auscultation are by no means inconsistent with theoretical error. Bean was doubtless a good auscultator notwithstanding his fantastic notions respecting the mechanism of signs. So the consonance theory of Skoda, which pervades his work, does not impair its practical value. Like the tripod from which the priests and sybils of old delivered their oracles, auscultation rests on three supports. One is the knowledge derived from the analytical study of the signs, another is the knowledge of the physical conditions incident to disease, and the third is the knowledge furnished by clinical experience which establishes constancy of connection between signs and physical conditions.

New York.

RELATIONS OF YELLOW FEVER, MALARIAL FEVER, AND MALARIAL HÆMATURIA.*

BY JOSEPH JONES, M. D.,

Professor of Chemistry and Clinical Medicine, Medical Department, University of Louisiana, and Visiting Physician of Charity Hospital, New Orleans.

I have endeavored by careful observation of the various symptoms, by analysis of the blood secretions and excretions, and by careful examination of the pathological lesions after death, to unravel the complicated chain of phenomena characteristic of yellow fever and other diseases; and while many facts are unexplained, and much remains to be investigated, we feel assured that the labors which we have pursued unremittingly during the past eighteen years have been at least in the right direction.

The malarial poison induces profound alterations in the constituents of the blood. Under its action, as I have fully demonstrated by the first series of investigations (Trans. Am. Med. Ass., 1859), the colored blood corpuscles are more rapidly and to a greater extent destroyed than in any other disease; the fibrin is diminished and altered in quantity and quality; the albumen is in like manner diminished; the extractive and coloring matters of the blood are frequently increased. The unhealthy hue of the complexion in malarial fever appears to be due to both the destruction of the colored blood corpuscles and the presence of coloring matter in the blood, the deposit of pigmentary matter, and the failure of the liver to separate fully the coloring matter of the bile.

In yellow fever there is no marked or uniform destruction colored blood corpuscles. The fibrin is diminished,

* This brief but very interesting article was addressed by its writer to Dr. R. B. Porter, of Courtland, Ala., in reply to certain inquiries relating to the subject, and was kindly sent to this journal by Dr. Porter.—EDS. AM. PRAC.

and to a much greater extent than in malarial fever. There is no tendency to the formation of fibrinous concretions in the cavities of the heart in yellow fever, while the formation of such laminated fibrinous clots is common in malarial fever, and in some cases is the manifest cause of death.

Malaria, by its effects in inducing sudden congestions, and by its depressing effects upon the heart and upon the general and capillary circulation, and by its potent action on both the sympathetic and cerebro-spinal system of nerves, tends to promote the formation of heart clots, although there is an actual diminution of the fibrin in the blood during malarial fever. In view of the rapid, feeble, intermittent pulse; disturbed, panting respiration; feeble, rapid, fluttering action of the heart; cold extremities, exhaustion of the muscular forces, stupor, wandering of the intellect, inability to control the muscles and acts of excretion; in view of the sudden onset of all the symptoms in malarial fever; in view of the observations which we have carefully recorded heretofore upon the lesions characteristic of malarial fever, we are justified in asserting that the fibrinous elements of the blood may be deposited in the heart and blood-vessels during life in malarial fever, and not only give rise to distinct phenomena, but cause death in cases which otherwise would not have terminated fatally.

It is worthy of observation that in pyæmia and in malarial fever, in both of which diseases there is a more rapid destruction of the colored blood corpuscles than in any other class of diseases, *chills* should characterize both affections, and form the most marked symptom. If such facts do not point out the nature of the cause of malarial fever, they at least sustain the belief that this disease, like pyæmia and yellow fever, is due to the action of a special poison, and not to mere variations of climate and changes of moisture and temperature.

The rapid destruction of the colored blood corpuscles in malarial fever is evident, not only by a comparison of the

constitution of the blood in this disease with that of yellow fever, but also by the presence of a larger amount of coloring matter in the urine. As a general rule, the graver the case of malarial fever the more deeply colored is the urine; while, on the other hand, the reverse is the case with yellow fever. The coloring matter of the urine in yellow fever is due to a great extent to the retention of the biliary matters in the blood and the failure of the action of the liver; while, on the other hand, the deep red and reddish-brown and orange-colored pigments of the urine of malarial fever appear to be derived chiefly from the colored blood corpuscles.

While the presence of the coloring matter in large amount in the urine of malarial fever may be dependent in part upon some imperfection in the excretion of carbon by those organs whose special function it is to eliminate this element from the blood, as the liver and lungs, and may, as has been observed by Golding Bird, be connected with some functional or organic mischief of the liver and spleen, or some other organ connected with the portal circulation, at the same time, from a careful consideration of the accompanying symptoms and subsequent post-mortem revelations, we have been led to the belief that in malarial fever the pigment is derived chiefly from the coloring matter of the blood-cells, and that its amount may be taken as an index or measure of their destruction. This would be true, whether it comes at once from the blood corpuscles by changes taking place in the mass of the circulating fluid, or by the destruction of the blood corpuscles in the liver and spleen. Certain it is that this pigment is not found in the kidneys, and does not accompany diseases of the kidneys; nor is it thrown off under the action of organic medicines and compounds, drastics and purgative salts, which irritate and even cause disease of the intestines and kidneys. Even tincture of cantharides, when given in such large doses as to cause albuminuria and even blood to appear in the urine, does not cause such pigments as purpurine (Bird), uroërythrin

(Heller), or urohæmatin urophæin to appear in the urine. In those cases of yellow fever in which we have the greatest irritation of the kidneys, or rather in which there is the greatest structural alteration of these organs, will be found, as a general rule, the lightest-colored urine. On the other hand, poisonous metallic salts, which derange the constitution of the *colored blood corpuscles*, and interfere with the *blood-making* or *blood-regulating functions of the liver and spleen*, as the compounds of lead, copper, mercury, arsenic, and antimony, cause even in small doses the appearance of this substance in the urine; and when taken in doses sufficiently large to produce poisonous effects the quantity is greatly increased.

In malarial fever the constituent of the blood which suffers to the greatest and most essential degree is the colored blood corpuscle.

In yellow fever the constituent of the blood which suffers to the greatest and most essential degree is the albumen and its modification fibrin.

The peculiar action of the poison in the former upon the colored blood corpuscles induces a distinct train of symptoms, and establishes distinct recognizable lesions, characterized chiefly by the deposit of pigment matter in certain organs; while in the latter the poison causes such changes in the albumen and fibrin as lead to the formation of non-nitrogenous and nitrogenous materials, some of which, as the oil and modified fibrin, are arrested or accumulated in certain organs, as the heart, liver, and kidneys.

During the active stages of both yellow and malarial fever phosphorus and the compounds of phosphorus in the nervous structures, as well as sulphur and the compounds of sulphur in the muscular structures, undergo more rapid changes than in the normal state; and phosphoric acid and the phosphates, and sulphuric acid and the sulphates, appear in increased quantities in the urine when the kidneys perform

their offices. The waste of phosphorus and of its compounds in the nervous structures during the active stages of the disease is greater than the supply of these materials through the food. The nervous disturbances and debility characteristic of these fevers, as well as of others, are in a measure due to those rapid changes in the phosphorescent materials of the nervous structures, and especially of the central ganglionic cells.

In many cases of yellow fever, and in that form of paroxysmal fever called *malarial hæmaturia*, the function of the kidneys is impaired, and neither the urea nor the mineral acids are increased in the urine; while at the same time they accumulate in the blood, and exert deleterious effects upon the nervous system and blood. The increase of the urea and of phosphoric and sulphuric acids during the active stages of these diseases should not therefore be considered as any thing peculiar and as at all distinguishing them from other fevers. It is only the tendency to congestion and alteration of the excretory structures of the kidneys that characterize yellow fever. The peculiar intoxication and nervous symptoms, as well as the black vomit of yellow fever, are intimately associated with suppression of the urinary excretion. In many cases I have found the black vomit of yellow fever to *give a strong alkaline reaction from the presence of ammonia resulting from the urea eliminated by the gastric mucous membrane.* I have also detected by repeated analysis *urea in large amount in the brain, heart, liver, spleen, muscles, and blood in yellow fever.* In this disease suppression of the action of the kidneys is more to be dreaded than black vomit, which it often precedes and induces.

The increase of these constituents of the urine is referable to the same cause—that is, increased chemical change—in both fevers, although it is evident that the nature of these chemical changes, and the special constituents involved, may differ in each disease.

During the slow action of the malarial poison, as well as during the active stage of the paroxysm, important changes take place in the liver and spleen which are wholly different from the changes of these organs in yellow fever. In malarial fever, in both the liver and spleen, the colored blood corpuscles are destroyed in large numbers, and the coloring matter resulting from the disintegration of the colored corpuscles accumulates in them, and in conjunction with other changes in the nutritive processes of these organs produce those characteristic alterations of the normal color. In fatal cases cellulose is found both in the liver and spleen, while grape-sugar is absent from the liver. The *bile* also is altered, both in chemical constitution and physical properties.

In yellow fever there is no destruction of colored blood corpuscles either in the spleen or liver, and no deposit of pigment matter, while *oil* is deposited in large amount in the liver, which, together with the bile, impart to this organ a yellow color far different from the *dark slate or bronze color of the malarial liver.* The spleen is comparatively unaltered in yellow fever. Both cellulose and grape-sugar are found in the liver of yellow fever.

That the chemistry of the body is deranged in a definite manner in malarial fever is evident from the changes of the excretions. *During the chill*, and at the commencement of the hot stage, phosphoric acid disappears almost entirely from the urine. As the hot stage progresses, and the febrile action and the heat commence to decline, there is an augmentation of phosphoric acid. The uric acid is either increased or remains at the normal standard during the chill, disappears almost entirely during the fever, and then increases rapidly and rises to a high figure after the subsidence of the febrile excitement, and often continues for days two, three, or even six times more abundant than in the normal state, as I have shown by a large number of observations published twelve years ago.

The sudden variations in the physical and nervous phenomena of malarial fever are accompanied by equally sudden and marked anatomical lesions and changes in the excretions. No such variations in the phosphoric or uric acids are observed in yellow fever. The poison inducing malarial fever acts in a definite manner, and is governed by definite affinities and relationships, and produces a type of disease distinct from yellow fever. The malaria of the swamps and marshes can only generate paroxysmal fever.

In the vast majority of cases of malarial fever albumen does not appear in the urine. This constituent of the blood may, however, be present in the urine in malarial fever under certain circumstances.

1. Its presence in the urine of malarial fever may be due to preceding disease of the kidneys, of the liver, or heart.

2. To the prolonged action of the malarial poison, and the structural alterations induced by it in the spleen, liver, and kidneys.

3. To the congestion of the kidneys from cold, or from the impaction in the capillaries of pigment matter, or from the irritant action of the malarial poison upon the excretory structures in cases which have suffered with repeated attacks of intermittents.

It is the exception to the rule to find albumen in the urine in malarial fever; it is the exception to the rule to find albumen absent from the urine of yellow fever.

Even in those cases where the prolonged action of the malaria has produced profound structural alterations of the liver, consisting in the extensive deposit of black pigment granules within and around the capillaries of the liver, obliteration of many of the branches of the portal system within the lobules, and in the hardening and contraction of the entire organ, albumen is rarely present in the urine. I have examined the urine carefully without detecting albumen in a number of cases of ascites and extreme dropsical infiltration

of the lower extremities, produced by the hardening and contraction of the liver in chronic malarial poisoning. I have observed cases, however, in which the kidneys were structurally altered by the malarial poison in a manner somewhat similar to the liver, in which albumen was a constituent of the urine.

A certain proportion of such cases may be referred to the causes which ordinarily lead to structural alterations of the kidneys, as the excessive use or abuse of ardent spirits, and the effects of exposure to wet and cold and extreme temperature; but there are cases of albuminuria which can be explained only upon the supposition that they are due to the structural alterations of the kidneys induced by the prolonged action of the malarial poison. And this condition of the urine is not to be referred to the watery condition of the blood induced by the destruction of the colored corpuscles and diminution of the albumen and fibrin; for the state of extreme anæmia frequently induced by the action of the malarial poison is never attended by albuminuria, unless there be some structural alteration of the kidneys.

In that form of malarial fever characterized by complete jaundice, intense vomiting and nausea, and hemorrhage from the kidneys, which has received different names at different times and in different countries, and which is *no "new disease"* even in these southern states, the hemorrhage from the kidneys is *preceded by congestion of these organs*, and is attended with *desquamation of the excretory cells*, and *tubuli uriniferi* of these organs.

Malarial hæmaturia (hemorrhagic malarial fever—new disease—up-country yellow fever), as a general rule, occurs only in those who have suffered from repeated attacks of intermittent fever, or who have been exhausted by a prolonged attack of remittent fever; and while some of the symptoms, as the nausea, incessant vomiting (and in extreme cases *black vomit*), deep jaundice, and impaired capillary circulation, resemble

those of yellow fever, yet there are marked differences, similar to those already indicated, as distinguishing malarial and yellow fever.

The presence of the albumen in the urine of this so-called "malarial hæmaturia" is attended also with the presence of colored blood corpuscles, excretory cells of the kidneys, and the *tubuli uriniferi*, impacted ofttimes with altered blood corpuscles. I have even detected the Malpighian corpuscles containing altered blood corpuscles, and deeply stained by the coloring matter of the blood. As a general rule in yellow fever, the *tubuli uriniferi* are loaded with yellow granular, albuminoid, and fibroid matter.

In those cases of malarial hæmaturia which have come under my observation there was evident congestion of the kidneys, attended with desquamation of the excretory cells and coats of the tubuli uriniferi and active hemorrhage. In some of these cases immense quantities of green biliary fluid was vomited, and the patients died in a state of apparent collapse. As a general rule, suppression of the functions of the kidneys is a fatal sign, and, as in yellow fever, may be attended with convulsions, coma, and delirium. A careful examination of the blood in malarial hæmaturia reveals great diminution of the colored corpuscles and fibrin.

The pathological changes observed after death are characteristic of malarial fever: enlarged slate and bronze liver, with pigment granules; enlarged and softened spleen, filled with disorganized colored corpuscles and pigment granules; gall-bladder distended with thick, ropy bile, presenting when seen *en masse* a greenish-black color, and in thin layers a deep yellow. As much as one thousand grains of bile of high sp. gr. (1036) have been obtained from the gall-bladder, while in yellow fever not more than one hundred and twenty grains of bile are, as a general rule, contained in the relaxed gall-bladder.

I have thus clearly demonstrated that *malarial hæmaturia*

is related to the various forms of true malarial fever (intermittent, remittent, and congestive), and in fact is only one of the phases of this fever which may at any time be assumed after the alterations of the blood, liver, and spleen induced by the prolonged action of malaria. I have also clearly shown that it is distinct from *yellow fever*, although it may have some symptoms in common, as jaundice, black vomit, and albuminuria.

The treatment of malarial hæmaturia should be conducted upon the same general principles which should guide us in the treatment of *pernicious* intermittent, remittent, or malarial fever; with this addition, that attention should be paid to the condition of the kidneys, and they should be relieved by cut cups and counter-irritation. The bowels should be freely opened by a mercurial (calomel is the best preparation) combined with quinine. Ten grains of calomel and ten grains of quinine is a useful combination. Quinine should be freely given. The strength should be supported by nutritious diet (beef-tea and milk punch), given by the rectum if the stomach will not bear it. Alcoholic stimulants should be used without any fear of injury. The action of the skin should be promoted by the hot-air bath and steam bath.

In brief, the *strength must be supported and the paroxysm arrested by quinine; the liver and bowels and portal system must be unloaded; the congestion of the kidneys must be relieved;* and during convalescence the blood must be enriched with pure and nutritious diet and iron, and a gentle action of quinine maintained.

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A PLEA FOR THE TRACTOR.

BY WILLIAM GOODELL, M. D.,

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My purpose is not to offer the vectis as a substitute for the forceps. The far greater power and range of the latter forbids any such rivalry. But I wish to present to the profession a better instrument than the one lying idle in their obstetric bags, to advocate its use in special cases, and to show that its action is mainly that of a tractor. Abroad the vectis is highly esteemed. In Italy, Holland, and Belgium it bids fair to displace the forceps; but at home it has fallen into undeserved disgrace. The cause of this disfavor is owing partly to the faulty construction of the American instrument, and partly to its use as a lever and not as a tractor. As sold in our shops it is too short for applications high up in the pelvis, is shaped to act mainly as a lever, and has too moderate a curve to cling firmly to the head; while the ambitious fenestra in the flat, thin, and metallic handle, made for the purpose of removing the obsolescent globe-pessary, renders the grasp unsteady and painful.

About fifteen years ago I stumbled upon a vectis—Lowder's I believe it is—which has served me so many good turns that I wish to bring it to the notice of the profession.

From this figure it will be seen that this vectis has a smooth, broad blade, a wide fenestra, and a curve much sharper than the one with which most of my readers are familiar. It has the further merit of being provided with an honest wooden handle, long enough for applications above the brim, and round and thick enough

to be firmly grasped. In addition, by a hinge in the shank, it can be folded up into a very portable compass. The shape of this instrument renders it a very efficient hook for traction; and also, by fitting any portion of the fetal head-globe, lessens the risk of its slipping, and consequently of its injuring the mother or the child.* Thus constructed the vectis virtually becomes a prolongation of the four fingers of one hand. It should therefore be used in precisely the same way and for precisely the same purposes as a thumbless hand would be used, could it reach such points on the surface of the child's head as are accessible to the vectis.

Granting then an efficient instrument, let me show the nature of its action, the mode of its application, and the conditions demanding its use.

With Dease, Davis, and Copeman, I believe that the aim of the operator should be to use the vectis as a tractor—viz., as a hook—rather than as a lever. My reasons for this opinion are as follows. In the first place, it is usually in refractory occipito-posterior positions of the vertex that the pure lever-action of this instrument is recommended, and theoretically it would seem to be demanded; but practically, in a large majority of these cases, the vertex will spontaneously rotate anteriorly, provided the head is forcibly flexed, and can be got down low enough to press upon the coccyx or to bulge out the perinæum. Now both these indications are met by pure traction on the occiput by the vectis. Even when the occiput tends to rotate into the hollow of the sacrum the vectis reverses its course not so much by leverage as by its hook-like action; the occiput being, as it were, hooked up toward the symphysis pubis rather than prized up. In the second place, even when pure traction is aimed at, the action of the vectis is a compound one. For, in order to keep the concavity of the blade in close adaptation to the convexity of the head, and

* This instrument can be obtained from Messrs. J. H. Gemrig & Sons, No. 109 South-eighth Street, Philadelphia.

thus to prevent slipping, a certain amount of lateral pressure is unavoidable, which partly converts the action into that of a lever of the "third kind." This inseparable lateral pressure, being proportionate directly to the tractile force, develops the needful amount of leverage—at least so have I found it. Again, if the vectis be used as a lever of the "first kind"—the head being the weight, the physician's hand the power, and the rim of the outlet the fulcrum—the head would be simply prized out or scooped out; and such a method of delivery is plainly at variance with the mechanism of labor, as well as hazardous to the integrity of the mother's and child's tissues.

From these points of view therefore the name *vectis*, or *lever*, becomes a misnomer in so far as it tends to mislead the physician and to misdirect his efforts. Strictly speaking, the action of this instrument, being the resultant of two forces—the one lateral, the other linear—is not essentially that of a *lever*, but that of a *lever* and *hook* combined. Further, its action may be virtually narrowed down to that of a *tractor*. For not only will it be safer to use it in that way, but the cases to which it is best suited are those in which, as will shortly be seen, pure traction alone is needed; the unavoidable lever-action being, in the extractive sense, wholly unnecessary, and in fact thrown away as so much lost power. For these reasons it seems to me best to lessen the prominence of this action. I shall therefore abandon the terms *vectis* and *lever*, and call it a *tractor*—a name which defines the bulk of its action, and which therefore is more technically correct.

The tractor can be slipped on without any change whatever in the usual lateral position of the woman and very generally without her knowledge. Whenever the head has descended so low as to press upon the coccyx the blade may be carried directly to the point on which it is to act; but in applications higher up, as the curve is a sharp one, it will be

necessary for the woman to draw up and abduct her right thigh, while the physician first introduces the blade along the hollow of the sacrum until it reaches the head, then inclines it toward the desired point, and finally adjusts it by sliding it onward, and by at the same time carrying the handle well back toward the perinæum. To whatever portion of the head the indication points there may the tractor be applied; but the face of a living child should, if possible, be avoided. The place of election is the sacral side of the occipital region, the fenestra being slipped over the occipital protuberance; and fortunately, in the majority of cases, here will it best aid the mechanism of labor. Whenever thus hooked on very forcible traction can be safely made.

The extractive power should be exerted rather in the line of the handle than at an angle with it, yet with such an amount of lateral pressure as will keep the blade from slipping. Traction should, in general, be made with both hands, but more especially with the one at the shank, its index-finger or thumb being kept on the head to note the amount of slipping. When the tractor is thus used, since both hands are exerting more or less traction, it is hardly possible to decompose its compound action by any given rule of mechanics. The bulk of its action is plainly that of a hook; and yet a portion of it may be described as that of a lever of the "third kind;" the hand at the shank being the power, the one at the end of the handle the fulcrum, and the child's head the weight. In those cases which demand very little extractive force one hand only may be used, and then the palmar aspect of the wrist corresponds to the fulcrum, for upon it will the end of the handle rest.

Traction should in general be made only during a pain; but in changing a faulty presentation to a more favorable one—that is to say, in correcting a deviation—it should be begun just before a pain, and kept up during its continuance by a long, steady pull. In cases simply of extraction a suc-

cession of short but steady pulls — not jerks — will, unless contra-indicated, prove much more serviceable. The effect of these interrupted efforts is to make each side of the head-globe descend in turn by alternate flexion and extension. The axis of the head-globe thus becomes a lever, while the tractor represents the power applied intermittently to one end of it. This imitates the side-to-side movement of the forceps.

Whenever the exigencies of the case demand the adjustment of the blade on the cheek or the chin, or on any part of the head lying in front of the ears, the force exerted should be carefully graduated lest the child should sustain injury. In view of this danger, and also of the fact that the portion of the head on which the tractor acts tends both to dip into the excavation and to rotate in the direction toward which the concavity of the blade looks, it is of the greatest importance to make an accurate diagnosis of the presentation and position; otherwise the instrument may be unwittingly placed where it might do harm to the child or interfere with the natural mechanism of the labor.

In three classes of cases may the tractor be employed: (*a*) those in which it acts more efficiently than the forceps; (*b*) those in which it precedes the use of the forceps; (*c*) those in which it may be substituted for the forceps. No sharp line of demarkation, however, separates any two of these classes; each one shades off into the other.

In the first class may be enumerated cases of insufficient flexion; such, for instance, as arrested occipito-posterior positions of the vertex, or of rotations of the vertex toward the hollow of the sacrum. Under such circumstances the blades of the forceps can rarely be applied exactly along the occipito-mental diameter of the head. Hence their grip will sometimes be found not stable enough to compel the requisite amount of forced flexion. The resistance of the mother's tissues then becomes the flexing agent, and delivery is accom-

plished by brute force only. The blades also will tend to play upon the head and injure the scalp. On the other hand, if the blades are applied with relation to the curve of the pelvic axis, and not along the sides of the head, a complete rotation into the hollow of the sacrum will in addition be liable to take place. But by the application of the tractor to the sacral side of the occipital region these difficulties vanish. Flexion is compelled, traction is made, and anterior rotation attained; the last both by the hooking up of the occiput toward the pubes, and by the oblique and upward pressure of the blade, which acts in the sense of an artificial perinæum.

In cases of insufficient extension, such as a mento-posterior position of the face, the tractor has proved in my hands a most trustworthy instrument. Passed over the sacral side of the face, it is far more efficient than the forceps in promoting an anterior rotation. The mechanism here is precisely like that of an occipito-posterior position, with the exception that extension instead of flexion is forced. Slipped over the base of the occiput the tractor renders very great aid in facilitating the final flexion of the head after the chin is born. Again, when the anterior lip of the os uteri is swollen, or is wedged in between the head and the pubes, and the fingers fail to slip it up over the occiput, the tractor, acting like a shoe-horn, will at once overcome this difficulty.

In those transverse cranial positions at the brim due to a contraction in the conjugate diameter, whenever the blades of the forceps can not be applied to the sides or to the fronto-mastoid diameter of the head, the following method, recommended by Prof. Fabbri, of Bologna, will be found of signal advantage—of far greater, in fact, than the application of the blades of the forceps over the face and occiput. The tractor passed over the *pubic* side of the mastoid region is at first used as a lever of the "first kind;" the left hand on the shank representing the fulcrum, and the right hand becoming the power by raising the handle toward the pubes. In other

words, each hand acts in opposite directions, the left one mainly to protect the pubes from pressure. As soon as the handle is raised high enough for the blades to secure a good purchase, and also to compress the offending transverse diameter of the head, then traction is thus made: the right hand is kept at rest to become the fulcrum of a lever of the "third kind," while the left acts as the power. This compound action of traction and leverage meets here several important indications. It compresses the head in its lateral diameter, flexes it, and forces its pubic side to revolve around the promontory of the sacrum as the center of motion, to glide over the smooth surface of the pubic symphysis, and to roll over into the pelvic cavity.

The tractor is not only a better corrector of malpositions and malpresentations of the head than the forceps, but it should precede the use of the latter in all such deviations from a vertex or a face presentation as interfere with the application of the blades along the long diameter of the head. In the one the head must be extended, in the other flexed, before the forceps can be used with safety. A typical example of departure of the chin from the breast is the presentation of the anterior fontanel, or sinciput. Usually this condition is transitory, but sometimes it persists. There are also other degrees of imperfect flexion ranging between a frank presentation of the sinciput and that of the vertex, all of which impede more or less the progress of labor. For instance, in my experience, very few cases of transverse cranial positions are uncomplicated with imperfect flexion. Of course in these cases the forceps must be applied over the face and occiput, or along diameters coinciding more or less with the vertical one; but if the tractor be hooked over the occiput and direct traction be made, the head will be flexed, and the forceps can then be properly applied. Often this mere flexion will alone suffice to start the head on; for the delay is owing to the correspondence of the cervico-bregmatic diameter, or of one

of its congeners, with the axis of the superior strait, by which the biparietal diameter is the first to engage in the conjugate diameter of the brim, and by which also the occipito-frontal circumference of the head, in lieu of the cervico-bregmatic, descends parallel to the successive planes of the obstetric canal. The wedge-shaped head presents, in fact, its broadest end first. Now by flexing the head we restore the occipito-mental diameter to a coincidence with the axis of the superior strait, and bring down the thin end of the wedge. The small occipital protuberance will now first engage, followed by gradually increasing diameters until the biparietal is reached. As Hodge has so admirably shown, these are cases belonging to the province of the tractor; for although the deviated head may correct itself, or may by the forceps (*if it holds on*) sometimes be pulled through by brute force, it will be at the expense of suffering to the woman and risk to the child.

The tractor may be substituted for the forceps, whenever the physician can not apply the latter, while the woman is lying on her side, and he has not assistants enough to change her position. When the uterine pains flag or stop the mere introduction of the tractor, or the slight start which it gives to the head, will, in my experience, very promptly awaken them. Again, the tractor does not present so formidable an appearance as the forceps, and most women will permit its introduction when they would object to that of the forceps. Whenever the after-coming head is detained, the tractor will save those precious minutes lost in the adjustment and the locking of the forceps-blades. I do not, however, advise in these cases the use of either instrument; but that of suprapubic pressure, conjoined with traction, made on the neck and ankles of the child, such as I have elsewhere described (American Journal of Obstetrics, 1871, page 484). To beginners it is always difficult and often impossible, in oblique positions of the head, to introduce and lock the blades of the forceps. Occasionally an expert is foiled in this attempt,

especially when he has been called in after the soft parts have become swollen, or when the child has long been dead, and it is therefore jammed down into the pelvis. The tractor then becomes a very valuable substitute for the forceps, and may indeed obviate the necessity for craniotomy.

But the cases in which, *par excellence*, the tractor can be substituted for the forceps are those of timid women or of unreasonable attendants. What physician has not met with labors in which the head coys on the brink of the brim without engaging; those in which delay is owing to a perverse coccyx, or to insufficient pressure upon the perinæum; in one word, cases in which a very little aid would save hours of suffering? His duty is clear, and he would gladly do it; but the woman is so nervous, or her friends are so prejudiced, that either the mere suggestion of the forceps is out of question, or else instrumental aid is obstinately put off until the patient, friends, and physician are all worn out. Under such circumstances the tractor is worth its weight in gold; for it can be whipped out of the pocket, slipped under the sheet, warmed in the hands, and applied very generally without the knowledge of the patient, and always without that of her friends. Nor when discovered by the patient, as has occasionally happened, have I ever found her disposed to resent the furtive attempt to relieve her. If the head be low down, the chance of discovery will be very slight indeed. If it be high up, the physician should first tell the woman that he is about to help her, and request her to draw up and abduct her right thigh. He then should distract her attention by accustoming her vagina to the presence and movements of three or four fingers, and finally slide in the blade along their palmar aspect. Sometimes ether may first be given; but it should be withdrawn as soon as the tractor is in position, in order to get all the aid possible from the pains.

The history of the tractor shows how covertly it can be used. It was undoubtedly invented long before the forceps,

and yet for many years after Chapman had publicly described the latter the former was not known to the profession. Although confided to several persons "for a consideration," the secret of its invention was kept for over ninety years, and was not divulged until the year 1753, when it was purchased for the immense sum of five thousand louis by two public-spirited Dutch physicians. Bland has, I think, hit upon the true explanation of this long-kept secret. In a very entertaining essay (London Medical Communications, 1790, page 418) he says that the forceps could not be applied "without giving such a view of them as would enable a curious bystander to form some general idea of them;" whereas "the lever might be used not only without the knowledge of the assistants, but even without the woman herself being conscious that any instrument had been employed."

Such then are some of the merits of the tractor. More could be given, but these will, I trust, serve my purpose of awakening an interest in a long-neglected instrument. In this plea I have tried to act the part not of a special pleader, but of an honest advocate. I wish therefore to be understood as striving not to degrade the forceps from the high rank which it deservedly holds, but to vindicate the credit of its more humble helpmate.

Preston Retreat, Philadelphia.

Reviews.

The Transactions of the American Medical Association. Vol. XXIII., 1872.

These Transactions maintain their portly bulk, which proves at least that the Association commands the labor of its members. The volume just issued strikes us as in many respects far superior to the earlier volumes which emanated from our medical congress. The reports of its committees are much shorter, a good deal more space is profitably devoted to the climatology and diseases of many of the states, and altogether its aspect is decidedly more practical than that of most of its predecessors. The appendix, containing the nomenclature of diseases proposed by the committee, would alone render it a valuable acquisition to the library of every studious physician; but the reports on clinical thermometry, on the white-blood corpuscle, on the present condition of vaso-motor physiology, on the production of vaccine virus, on phosphorus as an organismal element, and several others, possess a scientific or practical value which will insure their being read, and will cause them to be preserved for future reference. The meeting at Philadelphia was one of the largest and most harmonious that has been held, and the volume issued as the result of its labors is in all respects worthy of the Association.

The Committee on Medical Education reiterate the complaints and renew the recommendations of nearly all the committees that have gone before them. They are not satisfied with what the Association has accomplished in the way of reform, and insist that it take immediate and decided action,

so as to make itself felt as the head of the profession in the United States. "It must act quickly," they add, "or it will be powerless;" and a part of the action they propose is "an appeal addressed by the Association to the different state authorities, advising that no more charters shall be granted to medical colleges which do not agree to adopt the plan of teaching which this Association shall hereafter recommend."

We have the highest respect for this committee. The members are among the best in every sense belonging to our National Association. They are men of learning, of high moral tone, and of ripe experience, and we enter our dissent most reluctantly from their well-considered views; but in all candor we must say that this proposition strikes our minds as perfectly idle. An appeal to the state legislatures would be as vain, in our opinion, as calling "spirits from the vasty deep." The legislators would laugh at the appeal. Nay, more; if the Association should adopt the suggestions in regard to a high standard of preliminary education, and all the medical schools of the country should acquiesce in the decision, the legislatures of most of the states would readily grant charters for new schools to any squad of ambitious physicians who might ask for them. Nothing, according to our observation, is easier than to procure a charter for a medical college. It is a display of liberality in which our lawmakers especially delight to indulge.

But suppose the plan of the reformers carried out, and all the matriculates of our schools required to present the degree of bachelor of arts, would the number of medical students be diminished? Not at all. The number of matriculates would fall off immensely, and the number of well-educated physicians would be sadly reduced; but there would be just as many practitioners in the country as now. *Docti indoctique*, they would continue to swarm just so long as there was a demand for their professional services. But the people have been quite satisfied with their medical men as a body, and have

had reason to be so; for it may be safely asserted that, take them as a class all over the Union, they are quite up to their surroundings, and no body of men is likely to be much above or in advance of these. The average doctor of America is equal to the average lawyer, the average merchant, the average divine; and the great men in American medicine are the peers of the great jurists, the great divines, and the merchant-princes of the nation. Nor will any attempt at summary legislation make them any more. No one class can be pushed far in advance of any other. Scholars can not be made in a day. They are the product of an older civilization than ours. They come with wealth, and with the time and leisure which wealth purchases.

All the education that a man can acquire assuredly adds to his strength. In one sense it is indeed true, as has been said, that as many languages as a man knows so many times is he a man. All the scholarship of which he may be able to possess himself will widen the measure of his usefulness and add both to the grace and completeness of his life—will, if he be a physician, augment his charms at the bedside and his finish in the lecture-room; and yet we have the temerity to hold that an education which embraces the classics and the higher mathematics is not essential to a thorough acquaintance with even the highest and most intricate branches of the science of medicine. We go further, and affirm that such scholarship is not essential to the most eminent success in medical authorship—we might add, in authorship generally—and could easily adduce a long list of instances proving the truth of our assertion.

Conceding, however, that the lament of the old men of the profession at the decline of learning is well founded, we discredit altogether the power of the American Medical Association to remedy the evil by any legislation within its reach. Our learned brethren who write so freely about the right of the Association to "demand," "require," "exact," "enforce"

a certain standard of qualifications in students of medicine would seem to fancy that it has the power of the civil government to enact laws, and that it is backed by the gleaming bayonets of the government for carrying them into effect. The moral influence of the Association is great. Whatever it may recommend will be most respectfully considered by the profession, provided it appears that the suggestions have been well matured; but the Association will lose sight of its prerogatives, and of the true sphere of its usefulness, when it assumes to give laws to the profession.

We have contended, and we think with reason, that in the profession of medicine, as in the other professions, the standard of education is, on the whole, about as good as the general state of society permits it to be—about as good as the masses ask it to be. We have held—and we think our position is a tenable one—that the average character of the people determines the degree of education demanded in its physicians; and we believe, with Herbert Spencer, that if it were possible to change the system of education without the average character being first changed, evil rather than good would follow. We further agree with that most logical and philosophical writer that "in all its effects, learning the meaning of things is better than learning the meaning of words;" and that, whether for intellectual or scientific training, "the study of surrounding phenomena is immensely superior to the study of grammars and lexicons."

The preliminary education of medical students may be safely trusted to time and the new conditions which arise in its progress. It has been said that "until men have grown up to the level of a higher belief they can not receive it; nominally they may hold it, but not virtually." It is so with education. Any positive legislation, such as has been so often asked, in the direction of controlling it will effect nothing. The "constitutional conservatism of mankind," as it has been called, will prevent any sudden change in educational systems,

even though all those who would alter and mend and reform them should first agree (which they have never yet done) on what those changes should be. The needs of mankind will oblige education to keep pace with its progress and advancement in other directions. It has done so hitherto in the profession of medicine. It is fair to assume that it will continue to do so.

We beg to commend to those excellent gentlemen who are continually deploring the decadence of scholarship in our profession, and who are so impatient for some active interference from some source, the familiar maxim, *festina lente.* In fact, we would go so far as to hint the favorite motto of Sir Robert Walpole, *quieta non movere;* and if they must disturb the quiet and move things, we beg that they will not attempt it through federal legislation. The best rule in statesmanship is said to be "not to govern too much;" and the wisest rulers have been those who have observed this axiom. The American Government was greatly exercised for some years by the Mormon question. Many enthusiastic and well-meaning people urged one solution and another of the problem. The improvements in engineering and mechanics which made a railway to the Pacific possible, and the enterprise which constructed it, settled the fate of Brigham Young and his followers. To cite another example:

The question of the return of the banks to specie payments in this country has excited almost interminable discussion since the close of the war. Thousands of persons who were engaged in finance have demanded that the paper promises-to-pay be withdrawn from circulation and coin be substituted for it. The wiser people can already see that it was most fortunate for the country that the attempt to do so was not made. The question, as every great question of the world does, is solving itself. Gold to-day commands only a small premium, and in a very few years more the increased productions and industries of the country will so approximate the

values of coin and paper that one can be substituted for the other without creating disturbance in the currency.

Whatever may be the conditions and the abuses in our medical schools and in our system of medical education, we believe that they are gradually disappearing, and that time and public opinion will reform them, as "gradually all things right themselves." Signs of progress in every region of our country are evident to our minds. Let us cite a single example. About twenty-five years ago a few thousand adventurous men, allured by the tales of gold which was said to glitter under the setting sun, braved the perils of a trackless desert, around which hovered hostile savage tribes, and, reaching the shores of the peaceful sea, planted the banners of the civilization which they had abandoned and laid the groundwork of the great commonwealth of California. In a little while these pioneers were followed by their wives and sweethearts. In time the prattle of children was heard in their dwellings. Then came the field-school, then followed the public school, and now there is laid there the foundation of a University which, when completed, will rival in extent and equal in endowment the most ancient and renowned of the universities of the Old World.

One by one the other states will in time follow the example of California; and in the mean time our common-school system, which every one must see is driving private seminaries from the field, is slowly working out the result so greatly to be desired. Education is carried by it to every hamlet and to every door, and a mental culture more generally diffused than has ever been known in any country will be the fruit of this system; and then the preliminary education of students of medicine will become what we should all rejoice to see it; and the people, cultivated themselves, will have a keener eye, it may be, to the literary attainments of their medical advisers. We speak doubtingly as to this last result. We are not sure that many people will not continue to argue with the noble-

man, spoken of by Sir Henry Holland, who, when remonstrated with by his family for employing an illiterate physician, replied that "he thought a man who was so profoundly ignorant of every thing else must certainly know a great deal about medicine." But if the people are educated, the doctors coming from them must be educated too. Meanwhile what the people demand are physicians skilled in the cure of disease; and if they can find where the schools are that have museums, hospitals, and teachers for developing their sons into expert practitioners, there they will send them to be instructed. Science, learning, aptness in teaching, and professional experience and skill are sure to prevail in the long run against pretension, ignorance, and sham; and so the mushroom concerns so much deprecated by the friends of education will finally vanish, and the schools that rest on a sure foundation will remain.

Normal Ovariotomy. By Robert Battey, M. D., Rome, Ga. From the Atlanta Medical and Surgical Journal, Sept., 1872.

Dr. Battey's patient was twenty-three years of age, and only twice in seven years had any monthly flow. Vicarious menstruation sometimes occurred, and thrice retro-uterine hematocele followed by abscess. Amenorrhœa persisted in spite of well-directed constitutional and local treatment. The patient's health was breaking down, and death seemed not distant, when Dr. Battey conceived the bold, and for this purpose original, treatment of removing the ovaries, a treatment which was successfully executed.

It seems a sad commentary upon the inefficiency of our art that a disorder imperiling life could only be cured by the removal of healthy organs, and these organs, too, essential to womanhood.

Dr. Battey states that so far as his means of information enable him to judge "this operation is *unique* in the annals

of surgery, the nearest approach to it being in the celebrated case of Percival Pott;" and he narrates the case, familiar to most of the profession, where this eminent surgeon removed the ovaries because of their forming a hernia in either groin. Yet, if history be true, those ancient kings of Lydia, Andramys and Gyges, preceded Pott and Battey in making female eunuchs. This practice too—if Dr. Roberts, as quoted by Dr. Tilt, is to be believed—has been known in modern times in India. The following passage from Dr. Peaslee's recent work is also of some interest in this connection: "We are told by Wierus in his book, *De prestigiis*, quoted by Boerhaave, De Graaf, and others, that an Hungarian sow-gelder, nearly two hundred years ago, being disgusted by the lewdness of his daughter, exercised his professional skill upon her also." But we hope a man's medical orthodoxy will not be tested by requiring him to believe this legend.

We have no doubt that the operation of Dr. Battey, bold and successful, will attract the general attention of the profession; but we question the propriety of designating it *normal* ovariotomy. T. P.

Clinic of the Month.

Diet and Rest in Abdominal Diseases of Children.—Dr. Henry Blanchard, of Dorchester, Mass., recently read a short but very interesting paper (Boston Medical and Surgical Journal) on abdominal diseases as observed by him in the summer of 1870, from which we make the following extracts:

"With children suffering from disturbed bowels my general custom has been to nourish as far as practicable, no matter how young the patient, and to give nutriment in as condensed a form as possible.

"I usually allow children in their summer sickness, when suffering from thirst, as they are apt to do, a supply of cold water; of course using discretion as to quantity, state of stomach, etc., making it sometimes too the medium of such medicines that are appropriate, but which in a less diluted form would be repelled on account of taste. But cold water *alone*, and in full supply, has been often attended with the happiest consequences. I will refer to a case I had three or four years ago. This little child, between two and three years of age, had been sick for many days with severe bowel complaint, accompanied with almost constant vomiting. No food, no liquid, so far as tried, would remain in the stomach. A teaspoonful of water or any other liquid was vomited as soon as swallowed, and yet the thirst was tormenting. Emaciation was fast going on; the dangers of death seemed imminent. I determined to try the experiment of letting the little patient have her fill of pure cold water. I thought it could not make

matters much worse. A large pitcherful was called for, and a good-sized goblet filled and presented to the child, which was all swallowed with simply stopping once to rest and breathe. Another goblet was filled after a little delay, which was also drunk with great relish, the little patient only stopping once to rest and breathe. Then another was offered, which was seized with less eagerness; and after swallowing about half of it she looked up with what seemed a satisfied and grateful expression, put out her little hand and pushed back the glass as it was again offered to her, lay down in its mother's lap, and soon fell into a quiet sleep, followed by gentle warmth and perspiration; had no more vomiting, and was immediately afterward convalescent, requiring little further medical care.

"I leave it for others to explain why this little child, whose stomach was in such a state of irritation that it could not retain a single tea-spoonful of any liquid, not even water, could yet drink, with only an occasional stop to breathe, within the space of five to ten minutes, nearly a pint and a half, and yet retain it all. I do not mean that this treatment can always be so successfully and safely pursued in cases of bowel complaint, when vomiting is so persistent and thirst so urgent; but I believe that by carefully watching children in this disease, and by careful discrimination, we may often hit upon the very article they most need, and by giving it do a great deal toward a successful issue. In any case of a similar kind as related I should repeat the experiment, trusting that though the gentle stream but increased the flame, the flowing torrent might extinguish it.

"In some cases of bowel complaint I have found cold water, or a weak solution of soda in water, the only substance that the stomach would bear. When this condition obtains in the early stage, while the strength of the child is good, and as yet there is little or no emaciation, I have allowed it thus to be treated, absolutely nothing else being administered for

more than one week, when the stomach has become quiet and capable of retaining and digesting the food.

"As illustrating the advantage of patiently watching children with a view to learn their wants, a case may be stated in which I accidently discovered a longing for sugar. A little had been dropped into the mouth after something unpalatable had been given. I saw that it was sucked down with avidity, and an appealing look cast up for more. The difficulty here had been, as so often happens, to keep any thing down. I at once had a quantity of loaf sugar cut into small bits, and the child fed with them. As fast as one was dissolved it was replaced by another. From one to two ounces was thus taken in a day with great zest, which with a tea-spoonful of water occasionally was all that was used for several days; when tiring of the sweet it was found that other articles could be tolerated which before had been entirely rejected.

"At the risk of being somewhat tedious, I wish to give other instances illustrating that craving for something which the mute sufferer can not indicate, and which it too often, I believe, fails to obtain. A child, after a lingering bowel complaint with teething, seemed far gone, and the stomach rejected every thing offered. The case seemed hopeless. I had known raw beef recommended in some forms of bowel complaint. I determined to try it, and it was soon procured, scraped into pulp, salted, and given at first in small quantity. It was soon apparent that the child had found what it was craving. It was sucked down with all the eagerness it was capable of manifesting, and for nearly two weeks the child took almost nothing else. Convalescence was then so far established that a successful return was made to the ordinary articles of food.

"A very remarkable and, as it proved, a very interesting case was that of a child, about two years old, who had contracted diarrhea of a bilious type, and had, as the mother said, the chills. It had been long sick. On visiting it I think

I found the most emaciated specimen of humanity that I ever saw that was afterward restored to health. With diarrhea and vomiting of every kind of nourishment offered, it seemed a case hopeless of relief. Rather as an experiment than with an expectation of success, I directed a trial of brandy, milk, water, and sugar, made as strong of brandy as could be swallowed. Much to my gratification the child manifested a decided relish for it, and did not reject it. It was diligently persevered with, and the longer it was used the more it was craved and the better enjoyed. Soon a gain of vigor was perceptible in the child. Suffice it to say this was substantially the whole nourishment used until it had consumed three gallons of the spirit. At the end of from six to eight weeks so vigorous had it become that it was deemed expedient to wean it from its stimulant, and to substitute some other and safer form of nourishment. So strong had the love of brandy become that this was found no slight task. The little fellow, as he began toddling about on his feet, was for a long time earnestly calling for 'bandy, bandy.' After months, however, he was apparently weaned from it.

"As further illustrating the whimsical cravings of children, I will mention a case just now recovering from a bowel complaint of about five weeks' standing. The child, something over a year old, one month ago, and before being weaned, commenced with a watery discharge from the bowels and vomiting. The mother, suspecting for a certain reason that her milk was disagreeing with her child, had it taken from the breast. It had been accustomed to being fed from the table at times. Weaning, however, seemed not to have the effect of curing it. The disturbance of the bowels continued somewhat aggravated; the stomach remained irritable; it persisted in rejecting all the various liquids we are accustomed to prepare for similar cases, and became much emaciated. Having found nothing that seemed to meet the demands of the stomach, I directed that the child should be carried to the

table at the family meals, and to be watched for some indication of its wants. In this way it got access to some mashed potato, which it seemed to relish, and which also was not thrown from the stomach. The next article for which it seemed to show a desire was boiled cabbage, small quantities of which were also eaten with relish. A day or two afterward I happened to call on the family at one of their meal hours, and I saw my patient eating with great relish—picking it up with its fingers—little bits of meat and potato hash. The child is rapidly convalescing on this kind of diet. I should add that the child had been suffering exceedingly with teething, and that its gums were seasonably scarified.

"The few cases of dysentery which have come under my notice the past season have been of a mild form. I do not propose to say any thing of medical treatment in this disease. I will state my experience in the use of one article with which I indulged my patients, and which I also used the preceding summer. It was an indulgence that I found gave them no less surprise than pleasure. I allude to the use of watermelon, which, as is well known, we have had in great perfection and great abundance the past season.

"It is never difficult to persuade a patient to take what the appetite craves, though he hitherto supposed that the article was entirely prohibited. I have rarely seen patients enjoy any thing more thoroughly than they have the melon, and I have seen only the best results from its use. I need not say to be successful it should be in a perfect state, neither too ripe nor insufficiently so. In typhoid fever I have been in the habit of allowing it for many years, always finding it much relished, a good febrifuge and diuretic, and a valuable means of allaying thirst.

"I desire to bear my testimony to the importance and value of one other principle in the management of diseases under consideration. It is to be regarded of paramount importance; namely, quiet of body—*rest.* Highly important in

most diseases, it is indispensable in some. I do not fail to enjoin it most strictly in all cases affecting the abdomen. Even in cases not grave in character a quiet, recumbent posture greatly facilitates recovery. I dislike to have a dysenteric patient rise from the bed during the course of the disease. Children in their summer-complaints are equally benefited by a recumbent posture and entire quiet. I know it is not practicable to carry out this management with children always, but much may be done by perseverance and patience in this direction. Tossing babies about in the manner of some nurses and mothers, with the idea of easing their suffering and quieting their cries, must be looked on as an evil and useless habit. Cradles and other rocking machines should be condemned as worse than useless. The quieter children are kept the less suffering and the less demand for medicine. I feel it should be our constant aim and study to reduce medicine to the minimum, being sure that in the perfection of practice we may dispense with the use of drugs to a far greater extent than most physicians are ready to believe at the present day.

"I would not have any one present imagine for a moment that I undervalue the ordinary treatment in the summer-complaints of children. It is to exceptional cases—cases which are not amenable to the usual remedies—that I have desired to call attention. I wish to urge the importance of finding out by any way we can in these protracted and often intractable cases sometimes met with what the patient craves; and if we can discover this, let it have a trial. Instinct may prove wiser than reason. In practicable cases it is better to let the child select for itself. The general disgust that the child, after after weeks of sickness, acquires for almost every article of nourishment afforded in the nursery, makes this desirable. It may reject the very thing it craves when it sees you trying to force its use. Let it indicate its wants as far as possible, as in a case I above alluded to, and we shall be far more likely to obtain the desired result. Let various articles of food be

placed before it; then let the parent observe the pointing of the finger and the suggestive sound it will attempt to utter, and we can hardly fail to meet its wants. We have already seen that it is of less importance what the article is as that it meets the craving of the child. I do not expect this plan will succeed in every instance, but that it will do so accasionally my own experience, and no doubt that of many others, has abundantly proved."

On Death from Chloroform.—Mr. Erichsen, in a recent clinical lecture on this subject, said:

"Thanks to the somewhat frequent occurrence of the heading, 'Death from Chloroform,' in the papers, the subject is beginning to excite considerable amount of interest and apprehension among the public. In the profession there has been, I think, rather a tendency to avoid the subject—to look upon the occurrence of an occasional death from chloroform as a sort of necessary price paid for the advantages of anæsthesia. Whether this be the case—whether the fatal result really depends on an inexorable fate or on some more preventable cause—is, I think, worth inquiring into. Considering the extensive and general employment of chloroform for even the most trivial of surgical operations, a death directly due to its influence is happily of rare occurrence. During the twenty-five years that I have been attached to this hospital I have only witnessed one such death. It is a sight which must always produce a deep and painful impression on those present; the more so, since the administration of chloroform is by no means a necessary part of the operation. The relief of pain is in many cases nothing more than a luxury.

"All surgeons will agree with me that in extra hospital practice especially the administration of chloroform is that part of the operation which often gives most anxiety to the operator. In a hospital chloroform is generally administered by some one who is in the daily habit of performing that duty.

The process is watched by competent observers, and there is every appliance at hand in case of need. In private practice it is often given by the practitioner in charge, whose only experience is derived from a limited use of the drug in midwifery cases, and both the patience and peace of mind of the surgeon are upset; for indeed a considerable amount of practice and experience are required to enable a man to chloroform well. Some acquire the necessary skill more easily than others, but no amount of care can make up for the want of a certain amount of practice.

"We must confine our attention to deaths which are *directly and immediately* due to chloroform. These may occur in three ways—by the lungs, by the head, or by the heart; from asphyxia, from coma, or from syncope.

"1. *Asphyxia* may be caused, first, by tight clothing, or by any thing which hinders the respiratory movements, as a large abdominal tumor; second, by actual choking. If chloroform be given too soon after a meal, vomiting of semi-digested material is very likely to occur, and the larynx may be obstructed by it. A gag or false teeth may slip into the throat and cause choking. The tongue also, like the other voluntary muscles of the body, becomes paralyzed when the patient is fully anæsthetized, and by falling back into the throat may itself cause choking. Deaths from these causes, the first more especially, have occurred most often in dentists' practice. Simple asphyxia is not often actually fatal, though narrow escapes are common. The signs are so well marked that they can scarcely be overlooked, and the patient can generally be recovered if assistance be at hand.

"2. Death from *coma* due to chloroform is rare; still the only case with which I have been personally connected was due to this cause. The patient was suffering from chronic Bright's disease, and had slight symptoms of uræmia. The administration of chloroform had not proceeded far when convulsions occurred, followed by coma and death in about

an hour. In this case, at all events, the mode of death was evidently predisposed to by the poisoned state of the blood.

"3. We come at last to that part of the subject to which I wish more particularly to direct your attention—the death from *cardiac syncope*, as it is called. This is to me a very puzzling mode of death, as difficult to account for as it is to guard against. I presume that by the term 'cardiac syncope' is meant atony and failure of the heart's action. This is an easy explanation, but not altogether a satisfactory one. Among these numerous experiments which have been made with chloroform I do not know of any which prove that it has any direct syncopal action on the heart, or even any indirect toxic action on that organ through its nerves. Still there is no doubt of the fact that people do die without much disturbance of respiration, without becoming distinctly livid in the face. The pulse fails; that is the first thing noticed, and they are dead.

"Now my own idea is these are really cases of asphyxia; that the heart is secondarily, not primarily, affected; and my explanation would be as follows: after death we find in these cases a weak, fatty heart; the valves indeed healthy, but the walls thin, and the muscular tissue pale and degenerated. Now chloroform has always, especially at first, a slight asphyxial tendency. The patient calls out that he is choking, tries to pull away the inhaler, and breathes deeply, then struggles and holds his breath for a few seconds. In a healthy man this soon passes off—the inconvenience is merely temporary; but with a fatty, enfeebled heart it is different. The patient holds his breath for a few seconds, the right side of the heart is soon filled, there is weak propulsive power, the organ can not recover itself, and the result is fatal.

"Some years ago I made numerous experiments on death by asphyxia in animals; and I found that if once the ventricular action were stopped—if a contraction were missed—it was most difficult to start again; generally all was over. And

this is what happens in these cases: the ventricle can not be emptied quickly enough, the rhythm is lost, and almost instantaneous death ensues. The patient then does not die from the direct action of the chloroform on the heart, but from the effect of a slight asphyxial condition, which is inseparable from the administration of this agent on a disorganized heart. After death you may not find the right side of the heart greatly engorged; first, because great engorgement is not necessary to cause a fatal result; and secondly, the blood, even many hours after death from chloroform, is found unusually fluid, so that the dependent parts of the body are congested and the heart is left comparatively empty. Then also artificial respiration is always set up in these cases, and this tends to diminish the cardiac plethora.

"Finally, a few cautions. Never give chloroform without first thoroughly loosening the dress; if possible, not within four hours of a meal; the head should be moderately raised; the pulse, respiration, and color of the face must be carefully watched. As regards the occurrence of the rigid spasm already adverted to, I do not think that sufficient attention has been directed to this condition. A patient with an enfeebled heart is then in a most dangerous, even critical, state; the chest-walls are fixed, the lungs are filled with chloroform-vapor, which becomes diffused but can not escape; the pulmonary circulation is obstructed, and the pressure on the right ventricle rapidly increased. Let the patient partially recover, then give it again slowly; watch for any blueness around the mouth, etc. If the pulse fail, draw forward the tongue with forceps, and set up artificial respiration at once; but prevention is the main point. When there is well-marked asphyxia, artificial respiration is most useful and generally successful; but in these cases of so-called 'cardiac syncope' it is generally useless. The heart has been barely able to meet the ordinary requirements of the system; it can not recover lost ground; it gives in, as it were, at once."

Fall of Temperature in extensive Gun-shot Wounds. The Dublin Journal of Medical Science gives an abstract of a memoir by M. Redard on the themometry of gun-shot injuries, which contains the following: 1. In great injuries by fire-arms fall of temperature is a constantly observed fact. 2. Several elements come into play in producing this fall. Among the principal we will mention nervous shock, the excitement of the combat, with consecutive stupor, hemorrhage, and lastly, alcoholism. 3. Every wounded man brought into an ambulance with a grave wound, which seems to necessitate an operation, and who shows a temperature below 35° 5′ (95.9 F.), will die, and ought not consequently to be operated on. 4. Every wounded man in whom a salutary reaction is not produced within four hours, and by whom the reaction is not a direct sequence of the fall of temperature, must be considered as very gravely injured. 5. Burns give rise to an exceptionally great fall of temperature. 6. The same is the case in wounds of the abdomen. The fall is the more marked the nearer the wound approaches the stomach. The diagnosis of penetrating wounds may become less difficult on account of the characteristic thermometric phenomena to which they give rise. 8. The state of intoxication in which the wounded are sometimes found favors singularly the observed fall of temperature. 9. Wounds by shells, all other things being equal, produce a fall of temperature more accentuated than those by balls.

Ricord on Syphilis.—The veteran French surgeon's recent visit to England is said to have been prompted by his great personal regard for his old friend and distinguished pupil, Mr. Acton, who was to read a paper before the British Medical Association on the *Treatment of Syphilis.* When Mr. Acton had concluded the reading of his paper, Sir Wm. Fergusson introduced M. Ricord to the Association, who, after acknowledging the hearty welcome which he had re-

ceived, spoke (London Lancet) concerning syphilis as follows: There was one great question in regard to syphilis, and it was this, Could it be cured radically? In former times all venereal affections, no matter what, were considered as belonging to syphilis; and certainly there was then an immense number of radical cures by mercury or any other means. In this way swellings of the glands, soft chancres, even warts, and other things not belonging to syphilis, were easily enough cured—radically cured; and there were no after-consequences, no secondary symptoms. This explanation would account for the immensely large number of cases of (reputed) syphilis which used to be radically cured. But since syphilis had been correctly diagnosed, the inquiry to which he had devoted a large part of his life was to see what belonged to syphilis, and what resembled it without belonging to it. There had been great differences in the results of treatment, so much so that a doubt had arisen whether real syphilis could be cured. That doubt as to the curability of syphilis was not recent; it was a doubt which old authors had expressed; and one particularly, with a curious name, which they would probably remember—"Mercurialis"—thought that now and then an armistice might probably be made with syphilis, but that there was no real cure. In fact, they frequently saw that a long time—months, years—after the symptoms had been treated new symptoms appeared; and so the doubt whether syphilis could be radically cured, or whether the cure was only temporary, with a prospect of the symptoms returning, might still remain; he (Ricord), however, had established the law of the unicity of the diathesis of syphilis. The law of syphilis was the same as the law of small-pox, cow-pox, or measles. A man could have but one attack so long as the disease remained in the constitution; that was to say, according to his opinion, a new attack could not take place while the system was still under the influence of the old diathesis. Well, it was exactly so with syphilis. As long as a patient was laboring under

the diathesis of syphilis another *infection* of syphilis could not occur; it was impossible. For instance, after indurated chancre, and the appearance of secondary symptoms, it was not possible for the patient to contract a new indurated chancre, with swelling of the glands, manifestation of skin disease, and so on. After one attack the patient could not have another infection as long as the influence of the first remained in his body. A second contagion could not take possession of the system at the same time. If perchance something of the kind took place, the symptoms would not follow the regular evolution. So when a patient had constitutional syphilis, if a new chancre appeared to be hardened, they would not find the glands swell, or the early manifestation of skin disease appear; and so of other symptoms. Superficial ulceration might take place, just as a spurious form of vaccination might arise on one who was still under the vaccine influence; but it was not a true case—it was not attended with the sequelæ. But if the constitutional disease were cured, if the syphilitic disposition were completely eradicated, then the patient would be able to contract a fresh indurated chancre, with all the subsequent symptoms. If this were the case—and he had observed it with great care, his experience dating back forty years—it proved that syphilis could be cured; and if syphilis could be eradicated, to ascertain whether a patient was cured or not when all the symptoms had disappeared, there would be nothing else to do (though he knew that could not be done) but to try inoculation from an indurated chancre. If vaccination did not take, they were sure the vaccine disposition continued; if it did not continue, vaccination could take effect. In regard to syphilis, the proof had not been carried to this extent; but he had been able to observe that as long as the syphilitic influence continued a patient could not contract an indurated chancre anew, and that consequently, if cured, a new infection might take place. This was a great point gained in science, and it proved

what he had said, that syphilis could be radically cured. Now, as to the treatment of the disease, he would first speak of the treatment of the first stage; that was to say, the primary sore. As soon as he had ascertained that there was a hardened chancre, with a swelling of the glands—not inflammatory, because the glands in this case never suppurated—he immediately instituted the mercurial treatment. There was one point on which there was some difference of opinion: many believed that it was impossible to prevent the accession of the secondary symptoms, the first manifestation of constitutional disease; many thought that no matter what treatment was employed the sequelæ would appear. Well, he had ascertained that if the treatment were soon begun and well carried through, the bursting out of the first secondary symptoms, the roseola, the swelling of the glands of the neck, etc., might be prevented. If this were not frequently the case, it was because the treatment was resorted to too late, when the disease had had time to take root, and secondary symptoms were about to show themselves. In such cases it was not astonishing that secondary symptoms should appear, and the treatment ought not to be blamed. If the treatment were steadily continued, they soon disappeared; but if the treatment were begun early, the observation of forty years gave him the assurance that secondary symptoms would not appear. When secondary symptoms had appeared the best treatment was mercury. If they wished for a perfect cure, this treatment must be continued. In general it was not persisted in long enough. It was dropped as soon as the symptoms disappeared, or a short time after, and then it was not astonishing to see them reappear. But if the treatment were continued five or six months, having regard at the same time to sustaining the constitution in general, relapses would be found to be infrequent. He observed very few cases of relapse, and there would not be many when the treatment was well kept up—when the patient had patience enough and

the physician sufficient courage. After six months of that treatment and no symptoms reappearing, then the treatment with iodine must be begun, and continued for five or six months more. When a patient went to him he said, "You will have a year's treatment; do you consent to that?" "Yes." "Very well; we will go on. If not, good-bye."

There were cases in which syphilis occurred in a healthy person; the only disease was syphilis. Then treatment was very easy; the case was a simple one; they had but one enemy to fight; all went on regularly. But unhappily in many instances syphilis was not alone; there was something else—scrofula, skin disease, scurvy, low constitution, poorness of the blood. They must understand that such complications as these altered the case. The treatment did not act so powerfully as it would do in the first case, as many of these complications were aggravated by the treatment. For instance, syphilis and scurvy might co-exist; and the characteristic of the latter was poorness of the blood, while that of the former was a plastic condition of the blood. Here therefore was a counteracting influence to the treatment for syphilis. Now one thing must be known. In many instances syphilis became the secondary consideration, and they must begin with the constitution of the patient, as debility was the disease that required first treatment. They must attack the strongest enemy first. Syphilis was sometimes quiet, and stopped and waited till they came to it. So when they had improved the constitution they might commence with the treatment, and they must begin by treating the constitutional complication. The best treatment was the proto-ioduret of mercury. The stomach bore this well in general. Sometimes it gave rise to a little diarrhea, which was an easy thing to moderate; but when the stomach was not tolerant of the remedy, a capital treatment was rubbing-in. If this were not an unpleasant and disagreeable operation, certainly it would be in general about the best; he himself should prefer it. In rubbing-in the action

of the remedy was powerful and quick, and the stomach was not at all troubled with it. If it were not so disagreeable, and were a thing that could be done without being noticed, he should give it the preference. However, there were cases in which the skin was otherwise affected, in which there was a skin disease, and then friction could not be used. In a case of complication of syphilis and herpes rubbing-in could not be resorted to. In general, patients bore the iodide of potassium well, and in large doses. For his own part he frequently employed forty, sixty, eighty, even a hundred grains a day, and more. They must bear in mind that if they gave too small doses to some patients they would have no result. It was a remedy that passed through the body with great rapidity. He had had great experience with it, and he had found that in half an hour it had passed away in the urine. Iodide of potassium was a sort of broom of the blood. So they saw that the methodical treatment was this: mercury, iodide of potassium. But only one for the first stage, and only the other for the later stage of syphilis? No; the rule was absolute that as long as there were secondary symptoms well marked mercury must be given; when there was a mixture of secondary and tertiary symptoms, mercury and iodide; for tertiary symptoms, iodide. To treat some patients with iodide would not advance them in any way. Why? Because there was frequently in the constitution, in the blood, something of the second stage, something that required the mercurial treatment. This might not show itself; but when iodide of potassium ceased to do good, the disease remaining stationary, let them go back to mercury again, and they would have a splendid result where they had thought there was no further possibility of curing the patient.

But there was another thing. When syphilis had lasted for a long time, and had had a great effect on the constitution, it in some way disappeared, and left the patient with a complication existing that was not existing before. Sometimes

a long course of treatment brought on a new disease—wasting of the constitution, poorness of blood. They must then stop all the specific treatment, and, applying themselves to the principal symptom, restore the constitution by preparations of iron, bark, tonics, and proper food; so bringing the patient back to the possibility of undergoing anew a regular methodical treatment, either by mercury or iodide, or a combination of these two remedies. In former times, when a person was thought to be syphilitic, physicians seemed unable to entertain any other idea than that of syphilis, and acted exclusively against a specific disease, neglected every thing else, and in that way they experienced all the bad effects and accidental symptoms which a bad administration of the symptoms would produce.

Mr. Acton had spoken of the use of bromide of potassium. Was bromide of potassium an anti-syphilitic remedy? He did not believe that it was. He might be mistaken; but he had experimented with it in syphilitic symptoms, and without any apparent result. But it was a splendid remedy in complications of syphilis. In some cases of symptoms referable to the nervous centers bromide of potassium was an adjunct, and came to the help of mercury or the treatment by iodine. In some cases of brain disease with syphilis, and of disease of the spine or epilepsy, bromide of potassium did wonders. So that they would see it was a remedy to be applied in nervous complications that might occur, but they must not depend on it as an anti-syphilitic remedy. Now there were symptoms following syphilis which were not syphilitic, and these must not be treated with mercury or iodide of potassium. For instance, there might be necrosis. Well, they could not bring a dead bone back to life, no matter what quantity of mercury or iodide of potassium they might give. A physician must know these things, and he (Ricord) ought almost to apologize for bringing them forward. It should be observed that specific remedies did not always act specifically.

Certainly there was no specific effect without a specific cause; but specific causes did not always act specifically. So there were some effects of syphilis, such as disease of the bones, that would afterward act as a common irritant. In syphilis there might be an ulcerated bone in the nose or mouth bringing on suppuration. Mercury or potassium would not remove that; but let the diseased bone be removed, and the patient was frequently cured. They must take note of all these conditions—the nature of syphilis, the manner in which it conducted itself, and its action on the constitution. Let them particularly take note that the general law of syphilis was the same as the general law of small-pox, vaccine, and measles. If they were sure of this from what he had said, and from their own experience, then they might be sure that syphilis could be perfectly, radically cured. They could tell their patients that, and give them courage and hope. If the patient had courage to go through with the treatment, and the physician had courage enough to stick to it, the patient might be radically cured.

A question was asked whether Dr. Ricord was a believer in salivation.

Dr. Ricord replied: No, surely not. Salivation was an accident following the treatment, and it must be avoided as much as possible. There was but one case in which he approved of salivation, and that was in disease of the eye—iritis. When this occurred, and salivation was brought on, the inflammation of the iris subsided.

Dr. Gross asked whether the soft chancre was capable of contaminating the constitution.

Dr. Ricord said his opinion was that a soft chancre, when accurately diagnosed, never gave rise to constitutional disease. This was a law as absolute as possible. But they must be careful, or errors of diagnosis might be made. It was not always easy to establish the difference between soft and hard chancre; but when the diagnosis was certain they might be

sure they would not have any constitutional disease after the soft chancre. On the contrary, even as long as six months after hard chancre secondary symptoms would appear. This was one of the most clearly-established facts in practice. But the hardness of the chancre was not always well marked. It might be very superficial in those varieties that were attended with excoriation. When there was a something like parchment at the base, a chancre was very easily taken to be soft, but was not so; and he had had cases sent to him as instances of soft chancre which had been followed by secondary symptoms, but which were well characterized by the parchment-like base. However, there was a symptom of more value than the parchment base, a symptom that was one of the most important witnesses to constitutional affection, and that was the non-inflammation of the glands; they were cold and dull. In general several of them became enlarged. It was very seldom that only one was found to swell after hardened chancre; and not only were the glands swollen, but the enlargement frequently occurred on both sides, in both groins. The enlargement of the glands was of much value as a characteristic of hardened chancre. The enlarged glands appeared very early, even during the first fortnight of the existence of the sore. With the soft chancre the glands did not always swell. In a great many cases there was no swelling. They would never find a real hard chancre without swelling of the glands; and they would also find many cases of soft chancre with swelling, these cases depending upon surgeons confounding the hard chancre with thickening dependent upon inflammatory infiltration of the tissue immediately around the sore. But if the glands should swell after soft chancre, it was probable that suppuration would come on. With hard chancre there was no inflammation and no suppuration. The older writers directed their efforts to cause an indurated sore to suppurate, in the belief arising from the practical observation that when a bubo suppurated there was no constitutional dis-

ease, and therefore they were under the belief that the poison was thrown out of the body. In their quaint way of putting the fact, "they did not like to shut up the wolf within the fold." But they could not bring on specific suppuration in the case of indurated glands. It was impossible. He had tried all means of doing it, and could not succeed in the cases of specific suppuration. In the instance of soft chancre what had they to do—await the occurrence of suppuration, which might either be attended by simply inflammatory or specific bubo? With the soft chancre the inflammatory bubo appeared sometimes two, three, or four weeks after the occurrence of the chancre, and it had the characteristic pus of the soft chancre. There was such a difference between hard and soft chancre that it was difficult to make a mistake. When a patient consulted him (M. Ricord) suffering from soft chancre he said to him: "Be quiet; you may have a bubo; that will suppurate, but your constitution will be unaffected; you will not be liable to secondary symptoms." With a hard chancre he could predict indurated glands, attended by constitutional symptoms, within six months, provided proper treatment were not followed. He would add that when it was decided that the case was one of hard chancre or soft chancre the treatment was very simple. When there was a doubt as to the nature of the chancre he waited until some characteristic symptom arose. But there were cases in which the existence of a soft chancre did not prevent a patient from contracting a hard chancre. The patient might have the two species at the same time, contracted from different sources. The two species, hard and soft chancres, do not depend upon the difference in the ground, but on a difference in the seed (*contagium*). So that the newcomer who had relations with a woman suffering from the two species could take his choice. If the patient had a true indurated chancre, and well-diagnosed secondary symptoms, he might catch the soft chancre as often as he pleased, and it would be unattended with specific constitutional disturbance.

Notes and Queries.

THE VASO-MOTOR DOCTRINE.—Dr. Samuel Wilks, in the Address on Medicine, at the late meeting of the British Medical Association, says: "Next to the evil of allowing some metaphysical idea to influence our mind is the fault of taking a scientific fact or principle, and making it explain a number of obscure phenomena without our possessing any data to guide us as to the correctness of the application. With one a chemical theory is made to solve all abstruse questions in physiology and pathology; with another, cell-growth can do the same; and with a third a nervous influence can accomplish all things. See, for example, what a remarkable experiment of Bernard has done for us. He divided the sympathetic in the neck of a rabbit, causing the temperature to rise and the part to become more vascular. It seemed clear from this experiment that the vascular supply is dependent on nerve influence, and thus we are introduced into a new domain of vaso-motor and trophic nerves. What has been the consequence? Every ingenious man has sat down in his study, and assisted to flood medical literature with explanations of physiological action, morbid processes, or the therapeutic operation of medicines founded on the theory. Nearly every disorder of the nervous system, be it of an apoplectic or convulsive nature, as well as a large number of other morbid phenomena, can be now accounted for on the theory of an altered vascular supply through the vaso-motor nerves. The operation of many drugs is now made apparent by the influence they exert on nutrition through these nerves, the only difficulty being in the fact that the medicines have different

actions, whereas the vessels are only susceptible of dilatation or contraction. It is for this reason that theoretical men have found strychnia and belladonna the two great agents for rousing and depressing the nerve centers, thus enabling them to hold in their grasp the maladies supposed to be dependent on their rule. This great idea has been much simplified by substituting heat and cold, and thus these nerve-governing powers of the human body being stimulated to increased action by the one, or their over-activity controlled by the other, every single complaint to which the human body is liable can now be cured, and all by means of spine-bags. I take this as one example of our eagerness for more knowledge: there are very few on this earth who are presenting us with new facts, or rather revealing to us some hitherto hidden secret of nature; and when they do bestow upon us the result of their labors, we grasp it, we hug it, we can not make enough of it, until in the end we all become ridiculous. What we want are more facts and more truth. The praise can not be too great which is bestowed on those who are silently working in their laboratories for our advantage. It is more light and knowledge that we want.

Dr. Osborn's Address.—Dr. T. C. Osborn delivered an address to the Medical Association of Alabama on retiring from the chair of president, which we have read with unmingled pleasure. It fully sustains the high literary and professional reputation which the author has earned by more than thirty years of honest devotion to medicine. Such addresses leave their impress upon the bodies to which they are delivered, and impart a loftier tone to professional sentiment and ambition. It is with a feeling of pride that we mark the efforts of so many medical societies in the South, besides that of Alabama, to give higher dignity and usefulness to our profession.

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* Any of these works may be procured on application to Messrs. John P Morton and Company, Louisville, Ky.

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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

CLINICAL REMARKS ON THE ART OF DEPILATING.

BY M. H. HENRY, M. D.,

Fellow of the New York Academy of Medicine; Surgeon to the New York Dispensary, department of Venereal and Skin Diseases.

Among the essentials in the successful treatment of skin diseases I know of none that require more delicate skill and patience than the careful application of the forceps in the art of depilating. Experience has forced me to believe that the failures so often attributed to the depilating process have been due to a great extent to the want of skill on the part of the operator, and a reasonable knowledge of the main features of the art which are essential to the successful performance of any delicate surgical operation. There is no class of diseases that requires more care and judgment in the application of therapeutics than skin diseases, and the best therapeutists will concede that all good treatment depends largely on the care and interest manifested in the details.

To many of those who have had little or no practical experience in depilating it will doubtless seem a trifling subject

to dwell upon; but I have constant opportunities of knowing that it is an important element in the successful treatment of many affections of the skin of a parasitic character. I am further stimulated to do this from the fact that I am fully convinced that the want of interest manifested by so many practitioners in the treatment of skin diseases is due in a large measure to the want of a sound knowledge of the minute details in the application of remedies. It is, I think, unfortunate that the minutiæ of the art are so little taught in the regular courses of instruction at the schools and in the text-books.

The operation of depilation can scarcely be called a painful one if performed by an expert. If done in a clumsy manner, it will not only fail to produce the result desired, but will prove a source of irritation over the affected part not easily relieved.

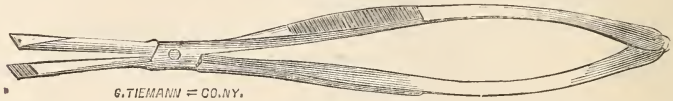
In many cases of parasitic diseases in and about hairy parts the eruption is not necessarily dependent on the parasite; nevertheless the spots or regions affected by the fungi are apt to show a very ready disposition to get up an irritable eruption without much effort. The same soil and conditions which favor the presence and growth of the fungus favor and induce the extraordinary tendency and disposition to eruptions and disease of the skin. Hence I believe that the chemical agents that have been so much employed as depilatories from time to time have too often proved a source of evil rather than of good. If the parasite found its home only on the surface of the skin, the simple application of parasiticides might answer very well; but, as in the case of favus, tinea, sycosis, etc., the parasite penetrates well into the interior of the hairs, and makes its home between their longitudinal fibers. Nothing short of the removal of the bulbs of the hairs, which are invariably loaded with spores, will correct the evil.

In depilating it must not be forgotten that a diseased hair is more easily removed than a healthy one. This is due to

the ravages of the parasite in the hair-follicles. The bulbs of the hair lose their tenacity and become necessarily less firmly attached than healthy ones. Besides, the hairs become dry and brittle from being robbed of their nourishment to feed the fungi; hence it will be readily understood why any harsh measures, such as rubbing or pulling by means of plasters (Calotte), will break off the free portions of the hairs without in any way removing the true source of the evil—the fungi imbedded in the hair-follicles beneath the surface of the skin.

Depilation by means of forceps is an old proceeding; I of course leave out of the question depilation with the fingers, which is a clumsy and tedious process, and does not, so far as I can see, possess one single advantage over the use of forceps. Ambrose Paré was in the habit of using the *pincette* for this purpose. The *pincette*, judging from the illustrations of the period, resembled a pair of ordinary dissecting-forceps, but of very clumsy construction when compared with the instruments of the present day. Dr. McCall Anderson thinks "they should be about three inches long, and should not have a strong spring, otherwise the hand soon becomes fatigued in using them. They should be made so that the two extremities come together very exactly, and do not slide the one upon the other. Each extremity should be a couple of lines broad, so that a fasciculus of hair may be caught up at one time when required, and should be furnished on the inside with denticulations after the manner of a file. It is of great moment that the denticulations should be very fine and also blunt, else the brittle hair may be cut across by them; and they must of course be arranged transversely, for the hairs would slip through them if they had a longitudinal direction." I agree perfectly with Dr. Anderson, and can indorse all that he says on the necessity of having carefully-made forceps for the special purpose of depilation; but the instrument he uses, and which is illustrated in his admirable work on parasitic

diseases, scarcely meets the essential wants which he so well describes; at least such has been my experience in practice. In my own instrument, made by Tiemann & Co., shown in the accompanying illustration, I have endeavored to overcome the



objectionable features which I find to exist in most of those in use for depilating purposes. The forceps are five and three quarter inches long, and have a very light elastic spring, which is conveyed by means of the shape, temper, and fastening of the blades at the upper end. There is scarcely any fatigue felt in using them, so nicely are they adjusted, and so slight the effort required to work them. The additional length of the forceps allows of more extension of the fingers over them, and thus avoids the chance of the fingers becoming cramped. The joint near the ends of the blades affords strength and perfect adjustment to the opposing denticulated surfaces. The denticulations are of course made in the manner and for the reasons described by Dr. Anderson.

The following conclusions, I think, embrace the main features of the course to be pursued in the management of cases where depilation is called for as a curative measure. Tact and judgment, so necessary in all manual arts, soon follow with experience.

As a preparatory step, and before commencing depilation, the hairs are cut, not leaving them longer than a quarter of an inch above the skin. I am then in the habit of rubbing, very gently indeed, a little oil of cade and olive-oil, or the latter alone, over the diseased hairs. This serves the double purpose of destroying the fungi lodged in and about the hair-surface by acting as a parasiticide; it lessens at the same time the sensibility of the scalp and softens the hair bulbs, and in this way facilitates the removal of the diseased hairs.

In depilating the diseased surface should be stretched between the first finger and thumb of the left hand, and the forceps held in the right hand in about the same manner as pursued in using the pen. If conducted in this way, little fatigue will be felt in the course of the ordinary sittings. Keep the forceps perfectly clean; do not permit any *debris* to collect round the blades. Be careful to extract the hair in the direction of its growth, thus avoiding the chance of its breaking off, leaving the fungus beneath the skin to again act as a source of evil. Never attempt to extract more than five or six hairs at one time. When taking up more than one always take the hairs in close proximity to each other. If the diseased surface is not very extensive, the hairs may be removed at one sitting. If a large portion of the scalp is diseased, the depilation of three or four square inches at one sitting will be sufficient. There are few cases in which the diseased surface can not be cleared in four or five sittings. Great care should be exercised in depilating not to proceed too quickly or too slowly. Experience will soon afford the best lessons on this point.

Patients who have sensitive skins are very intolerant of the depilating process, and on such persons the operation should be very slowly and carefully performed. When a square inch of the diseased surface has been denuded depilation should then be suspended, and the parasitic ointment or solution applied with a soft camel's-hair brush. The evulsion of the hair is then resumed, and the same course pursued after another space has been cleared. This plan should be followed until the end of the sitting.

A few hours after depilation has been performed the parasiticide should again be thoroughly applied, and the application continued every morning and evening until the patient is entirely relieved of the disease.

Frequently the first depilation will prove unsuccessful. When this is the case the operation should be repeated until

success is attained. The best ointment for the purpose is that recommended by M. Bazin, as follows:

℞. Oil of cade, ... ʒ ss;
Simple cerate, . . . ʒ v.
Mix and make into ointment.

An exceedingly nice preparation is formed by the substitution of the glycerine and starch cerate, which is now an officinal preparation. The following formula, suggested by Dr. Puegnet, promises to answer the necessities of these cases in a very reliable manner.

℞. Veratria, ... gr. iii–v;
Acetic acid, dil., . . *m* x;
Glycerine, ... } āā ℥ ss.
Rose-water, . . . }
Mix and make into solution.

Should there be any irritation of the scalp following the complete removal of the spores, it should be treated on general principles by means of soothing applications.

NEW YORK.

CLINICAL CONTRIBUTION TO DISEASES OF WOMEN.

BY THEOPHILUS PARVIN, M. D.

OPERATION FOR RUPTURED PERINÆUM.

Mrs. C., about thirty years of age, became unconscious after being about twenty-four hours in her third labor, the pains most of this time having been very severe; this unconsciousness neither preceded nor followed by convulsions. She was immediately delivered by forceps of a large child, which was dead. Rupture of the perinæum took place in the delivery.

My first visit was made to the patient four months after the accident, its object being to operate for the restoration of the perinæum. The rent was complete from the vulval to the anal orifice, and extended up the rectum nearly one inch.

The patient having been placed in the lithotomy position, two assistants supporting the limbs with one hand, with the other pressing downward and outward near the lower part of the vulva, so as to fully expose and render flat the surface to be freshened. The instruments used in this process were the scissors and hook used by Dr. Emmet in operating for vesico-vaginal fistula. The edges of the rectal rent were also freshened, but by beveling incisions. A conical needle, an inch and a half in length and slightly curved toward its point, was first threaded with silk, and to this silver wire attached. It was then by means of Sims's needle-forceps, entered on one side rather more than half an inch from the margin of the anus, and nearly as far back as its center, and directed upward and inward, so as to emerge about midway of the rectal rent and upon the rectal side; then was carried through similarly, but of course in a reverse direction, to the opposite side, so that the final point of emergence corresponded to that of first entrance. The object of this suture was to prevent the eversion—that is, into the rectum—of the edges of the rectal fissure. Three other sutures were similarly passed, only completely buried in the tissue intervening between the rectum and the vagina; the needle being guided in its course by a finger in the rectum, and the tissues upon the side of exit being pressed down upon its point, so that, the instrument traversing a greater distance than its length, these tissues seemed "puckered" upon it. Each successive suture of course receded further from the anus and approached the orifice of the vagina. Finally a fifth suture was passed merely to hold the anterior portion of the perinæum together. It of course was not buried as the others were, but merely passed so as to include the freshened surface of either side.

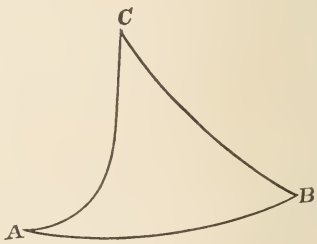
The sutures all passed, the patient's thighs were approximated, the wires twisted, commencing with the lowest, the knees bandaged, and opium given to secure rest and constipation. The catheter was used twice in the twenty-four hours, and a diet chiefly of milk and animal broths observed.

In eight days the stitches were removed; in four more an evacuation of the bowels, effected by a saline and a warm-water enema. The cure was entirely satisfactory.

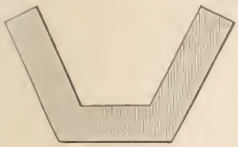
Remarks. It will be observed that in this operation I followed essentially the practice of Dr. Emmet, who has done more probably than any one else to simplify and render

certain the surgical proceeding for restoration of the perinæum. Before, however, considering further the operative procedure, a word or two as to the perinæum, and as to the classification of its ruptures, may not be inappropriate.

The perinæum is often spoken of as the space between the vulval and the anal orifice. But this is only one side of a triangular body, which has a vaginal and a rectal as well as an external surface. In Gray's Anatomy we learn that the posterior wall of the vagina is in relation with the peritoneum superiorly, but in the rest of its course with the rectum. In Todd's Cyclopedia of Anatomy and Physiology a correct statement is given, making the lower portion of the posterior wall of the vagina in relation with the perinæum. Allowing the superior fourth to correspond with the peritoneum, the middle two fourths with the rectum—at which point the two organs seem to have about the same curve—the lower fourth bends rather sharply forward, and is in correspondence with the perinæum. Were a plane passed directly upward through the perinæum, the figure which results would more nearly represent an isosceles spherical triangle than any other form we can think of. In the diagram here presented, which is in proportions and form very nearly if not quite an accurate representation of such a figure, the line C B is the vaginal, A C the rectal, and A B the external surface of the perineum. Now this is not, in the opinion of the writer, a mere matter of speculative interest. Its recognition is vastly more important to the operator than any minute anatomical and physiological knowledge of the various muscles and other structures involved. If correct in the view presented, the operation for perineal rupture requires the denudation of surfaces represented by two spherical triangles. Compare this with the standard representation of



our authorities. Look at Baker Brown's Surgical Diseases of Women, or "Thomas," or even on page 363 of the first volume of the American Practitioner, and there is a poor creature* with the inferior portion of her trunk horribly disfigured by three freshened quadrangles, which when brought in apposition can no more make a normal perinæum than a circle can be squared! We here present the *cuts* without the *cut*, and we defy any one to make a triangle of any sort by the junction of the three quadrilaterals.



Ruptures of the perinæum are conveniently divided into *partial*, *central*, *complete*, and *complicated*. Any rupture stopping this side the sphincter *ani* would be partial; even though so slight that it involved only the posterior commissure,† it would still be a rupture. Of course, when of such small extent as that last mentioned, said too to generally occur in the first labor, it would not demand operative interference. Even when the laceration reaches to or near the sphincter *ani* I am not satisfied that it is followed by any serious inconvenience in the majority of cases. In some doubtless the posterior wall of the vagina prolapses, becomes raw and inflamed, and ultimately uterine prolapse consequent upon the vaginal displacement possibly may occur. But certainly in two cases under the writer's observation, where the rupture is as extensive as indicated above, the subjects do not suffer the slightest

*That great master of English composition, De Quincey, in one of his most graphic and thrilling narratives, utters the following: "See then that bronze equestrian statue. The cruel rider has kept the bit in his horse's mouth for two centuries. Unbridle him for a minute, if you please, and wash his mouth with water." We don't care half so much about the bronze horse getting a drink as we do about that unfortunate woman whom Baker Brown put on the operating-table twelve years ago, and whom all the authorities are trying to keep there, being permitted to retire to private life.

† This word seems to me preferable to fourchette, although the last is generally used. It is quite proper for a woman to have an *arbor vitæ*, or tree of life, in her uterus; but to have a fourchette, or fork, in her vulva is dreadful!

distress or inconvenience. Especially is it to be noted that there is no uterine prolapse; and the writer's observation, though of course not large enough to decide the question, leads him to fully believe the opinion expressed by Dr. Bell in the Edinburgh Medical Journal (quoted in the American Practitioner, July, 1871), that the perinæum has very little to do with the support of the uterus.

There is still another variety of partial rupture of the perinæum, referred to in Boivin and Duges's Treatise on Diseases of the Womb and its Appendages (Paris, 1833), which seems to have escaped the observation of more recent writers—that where rupture involves the skin of the perinæum in its entire extent without the subjacent tissues being at all involved.

Less rare than this last variety of partial rupture, though still exceedingly rare, is *central* rupture, or perforation of the perinæum. The designation is sufficient without waiting to define the meaning of the term, or to explain the mechanism. By *complete* rupture is understood one extending through the sphincters of the anus. In this lesion of course there is fæcal incontinence; but if only the external sphincter is torn, the patient has some control over the rectal contents.

Complicated rupture is when, conjoined with *complete*, the recto-vaginal wall is divided to a greater or less extent. In strict definition, there can not be an entire laceration of the perinæum without the rectum being divided at least an inch above the anus; for the perinæum anatomically belongs no more to the vagina than to the rectum; it is interposed between them, and has, as previously stated, a vaginal and a rectal as well as an external surface. Nevertheless, general professional use forbids any change in the meaning attached to these terms.

Having already taken so much space in the discussion of this lesion, and having in the case that was narrated given the outlines of the method of operating for its cure, the consideration of treatment will be brief.

But we are met at the outset by the question, should an operation be performed immediately upon the receipt of the injury? Probably, although opinions are divided, the general teaching and practice of the profession would answer affirmatively. In the only case in which I resorted to an immediate operation it failed. But upon this point I shall be content to quote a recent French writer, Dr. J. Cornillon, believing that the opinion he expresses is correct: "Nevertheless, when we have so many contra-indications in the conditions of the parts after delivery, and so many accidents that may occur, we should hesitate before determining to use sutures. I think that success would be more certain were we to wait until the edges of the laceration were cicatrized and the tissues had recovered their vitality. Two months at least are necessary for this result. Immediately after the accident we should be content with fastening the limbs together with a suitable bandage, or apply *serres-fines;* and if reunion does not take place, resort to perinæorrhaphy at a later period." *

Omitting then all special consideration of the immediate operation, I shall refer briefly to some points in regard to it as performed at a subsequent period. It ought to be premised that the subject should be in good health. Some years ago I saw an operation for lacerated perinæum, well performed by a skillful surgeon, fail simply because the patient was weak and debilitated. Two assistants are required—three if an anæsthetic is given—whose duty it is to support the limbs and expose the surface to be freshened. Scissors, as Dr. Emmet has so well asserted, are much preferable to the knife for freshening the surfaces to be brought in apposition; cutting with them can be done more quickly, with greater accuracy, and with much less hemorrhage. Of course, for obvious reasons, the cutting is commenced at the skin-margin of the perinæum. Probably it is best too for most operators to complete the work on one side before commencing that on the other. The

* *Des Accidents des Plaies pendant la Grossesse et l' Etat Puerpéral*, Paris, 1872.

size and special shape of the vivified surfaces of course will vary with the extent of the rupture; where this is complete, and of the recto-vaginal wall, they will correspond to two triangles, each one of the sides of the triangles* measuring more than one inch.

The number of sutures may be four, five, or six—too many better than too few—and their material should be silver wire. The *position* of these sutures, it seems to me, is not a matter of indifference. Let any one examine illustrations of perinæorrhaphy, and he will see in the cuts showing the sutures already introduced, but not yet fastened, that these sutures are seen crossing over from one side to the other of the vagina, their middle portion fully exposed. But it must be evident that a suture which *encircles* the two rent portions must keep them in better apposition than one which embraces a part only of each side. Accordingly it seems to me much the better way for the needle to be buried in its entire course, entering the skin on one side, and not emerging until it has passed beneath the entire freshened surface and penetrates the skin on the other side at least half an inch from the margin of the laceration. In cases where the space to be traversed is so long that the needle can not be carried so far, it ought to re-enter, when grasped again by the forceps, just where it came out, and then pushed on to its final point of exit.

The position too of the first suture is a matter of importance. Dr. Emmet states—and the instruction should always be remembered—in his work upon Vesico-vaginal Fistula, that the needle is introduced "nearly half an inch below or

* The reader, should he consult Dr. Agnew's paper on *Laceration of the Female Perinæum*, Pennsylvania Hospital Reports, Vol. I, 1868, will find on page 59 a representation of Baker Brown's operation, said to be copied from his book, which is incorrect with reference to the shape of the denuded surface, as any one can see by comparing it with the original or with the copy which is found in "Thomas." Dr. Agnew's artist improved very much upon the form Mr. Brown has given, yet still failed, as I think, in giving that which should be the shape of the freshened surface.

further back toward the coccyx than in the usual mode of operating. The result is that when it is secured a line of unscarified rectal surface is brought together, with the effect of crowding upward the denuded surfaces firmly together in contact throughout."

But suppose we have what is termed a *complicated* rupture, will a single line of sutures from A to B (referring again to fig. 1*) be sufficient? In such cases Demarquay resorts to three orders of sutures corresponding with the three surfaces to be brought in union. The easiest way of treating these cases is to first restore the integrity of the recto-vaginal wall, then by a subsequent operation close the external perineal opening. But if determined to accomplish all in a single operation, there must be vaginal as well as vulvo-anal sutures.

In the method of operating which has been detailed it will be observed that the division† of the sphincter ani insisted upon by Mr. Brown and many other operators is not referred to. It seems to me that Dr. Emmet's success has demonstrated that the sphincter does not need stretching or cutting to insure the success of a perinæorrhaphy. Such steps are probably as unnecessary as the lateral semi-lunar incisions of Dieffenbach.

INDIANAPOLIS, IND.

* We ought to state as to this diagram that it was intended to represent the full size and form in the adult of a vertical section of the perinæum through its center. The form—so far as the vulvo-anal, the rectal, and the vaginal lines and their relations are concerned—is taken from Gray's Anatomy, and is very nearly accurate. The size, by an error of the engraver, has been made nearly one third greater than it should be. But even taking this diminished size, it should be remembered that it is only when the perinæum is completely rent from C A forward to B that the surface to be denuded on either side will equal it. In other instances the laceration will include but a section, greater or less, of the triangle.

† This step was urged by Mercier as early as 1839, though Mr. Brown makes no reference to it.

ON ACNE.*

BY L. D. BULKLEY, A. M., M. D.,
Editor and Translator of Neumann's Hand-Book of Skin Diseases, etc.

After Dr. Bulkley had read a synopsis of his paper on acne, Dr. Weisse was called upon to open the discussion.

Dr. F. D. Weisse said that he did not use the term acne nor that of eczema in clinical teaching, preferring the word folliculitis for the former affection and dermatitis for the latter. He considers acne an impairment of the sebiferous follicles, whereby the quality of the sebum becomes altered, the inflammation of the glandular elements being secondary. With him the disease is rare after forty years of age.

As to the treatment of simple acne, it is most successful in early life; but must be continued, as a rule, four or five years—certainly till after the age of twenty—to make the cure permanent. Emptying the distended follicles he regarded by far the most important element of treatment. This is to be done after the application of very hot water to the face, three times a day, for ten or fifteen minutes. Soap should be avoided, as also too frequent ablution.

Acne rosacea, he stated, is frequently dependent upon sexual difficulties, and is often cured by marriage. He agrees that digestive disturbances are also a potent cause. Young ladies thus affected, he has observed, as a rule, avoid fat and eat but little meat. The use of these should be encouraged, and fatty matter may be added to the diet or given as medicine, as half a pint of cream daily, glycerine, cod-liver oil, or even olive-oil. As local applications, Dr. W. advises any

* Dr. Bulkley's paper on Acne was published in the December number of the American Practitioner. Dr. B. subsequently read a synopsis of it before the New York Academy of Medicine, where it gave rise to the discussion which, through Dr. Bulkley's kindness, we are now enabled to lay before our readers. It was intended that the article should have appeared in our January number, but it was crowded out by other matter.—EDS. AM. PRAC.

greasy application, even simple suet, scented, to be applied at night after the hot douche, followed by squeezing the masses from the follicles. In the morning the fatty matter is still left on, the face not washed, but a powder of equal parts of subnitrate of bismuth and prepared chalk is dusted on, and removed by lightly brushing the face. Hebra employs a very weak ointment of the bichloride of mercury. The speaker had also used an ointment as follows:

℞.	Pulv. camph., . . .	gr. v;	
	Sulph. flor., ...	ʒ ss–i;	
	Ung. simpl., ...	℥ i.	M.

He considers acne rosacea thoroughly amenable to treatment. He had pressed arsenic to a toxic effect, and kept it up for six weeks, without any benefit in this disease. He had seen, however, good effects from cod-liver oil.

He knows of no connection between acne and spermatorrhœa or masturbation.

Dr. J. C. Peters remarked that he looked upon the internal origin of acne as the one more important by far, and demanding greater consideration. He argued from the action of iodide and bromide of potassium, as he had seen the disease follow their use when the kidneys were not freely acted on; but when free diuresis occurred no such result followed. In some, however, each dose produced its crop of acne pustules.

The inflammatory phenomena of some forms of acne he regarded as dependent upon the irritation set up by a chemical decomposition of the dried sebum. This is seen elsewhere; when the secretion collects beneath the prepuce the glands may become inflamed. A continued accumulation of dried sebum on an infant's head gives rise to a secondary eczema. This process, he infers, takes place within the follicles, it being secondary to the malsecretion.

We are too apt, he thought, to look for a single remedy for all cases of a disease, and desire a routine treatment. This

is especially injurious in acne. Each case is different, and must be treated in its own manner. Arsenic is injurious in the acute inflammatory stages, and is only useful in long-standing and torpid cases. He esteems acetate of potassa as one of the most useful remedies in this disease; borax given internally being almost as good, and having this advantage, that it may relieve amenorrhœa at the same time. Borax is also valuable externally. He has seen good results follow the internal administration of tar, five to ten grains, with aloes. Sulphur given internally is also serviceable in some cases. Muriate of ammonia assists at all times by its action on the liver. Sulphate of potash and corrosive sublimate are injurious locally in acute cases. He has been disappointed in the wash recommended by Sidney Ringer, composed of lac sulphur, ʒ i; glycerine, ℥ i; aquæ, ℥ iv.

Dr. B. Howard regarded acne primarily as an unhealthy condition of the secretory membrane of the follicles, the inflammation being caused by the imprisoned sebum. He could not regard the causes given by Dr. Bulkley as the true factors of acne, because, he said, many of them existed where there was no acne; but he admitted some of them to be coincident conditions of such a nature that their improvement was followed by an amelioration or cure of the eruption. He could not agree with Dr. Weisse that the first treatment of acne was generally successful; but thought that those who saw the cases last, after others tried, most often cured the affection. Married life assists the cure.

His indications for treatment were: keep the skin of the whole body, especially the face, soft and flexible, to give free exit to the sebaceous secretion. Constipation is an important element, and must be avoided. His favorite remedy, which he would recommend very highly, and which he almost considered *the remedy*, was bitartrate of potash. This to be given, morning and night, in sufficient quantity just to secure a free action of the bowels—often about half a drachm. He has

also seen good success from rhubarb and soda powders. He is very careful about giving arsenic in these troubles.

Dr. E. L. Keyes considered that there were three very important elements to consider in approaching a case of acne, and that in reference to prognosis and treatment. These were the hereditary tendency, the scrofulous diathesis, and gout. The first of these, hereditability, he thought was too often overlooked. He has noticed a curious crossing with regard to sex in these cases where the disease has passed through several generations. Thus he has two young men under his care from different families, in each of which the sons only are afflicted with acne, and this inherited from the maternal side. This transversion he considers not uncommon in other diseases. Cases where a family history of the disease can be traced prove more intractable than those occurring for the first time in the individual under consideration. Acne rosacea occurring late in life is also very obstinate. He had met with a lady who had lost her acne several times during pregnancy, it returning afterward.

The treatment, he thought, should depend upon the cause, taking largely into consideration the scrofulous and gouty diathesis. When a gouty habit of body exists, continued exercise is very necessary. Arsenic is useful only when it is well digested; it aggravates some cases. Locally, he uses hot water, with an alkali, as bicarbonate of soda, a drachm to the pint, rubbing the face afterward violently with a soft towel. Bichloride of mercury is favorable in mild cases, in strength varying from one to two or even five grains to the ounce. Benefit may also be obtained from a solution of half a grain to the ounce.

The speaker, however, dwelt much more on the internal cause of acne, intestinal and stomach derangement, and the consequent necessity of judicious medical treatment, emphasizing the value of outdoor exercise. He places much less faith in local remedies.

Dr. R. W. Taylor said that the cure of acne was not so easy as might be inferred from what had been said by those who had preceded him. The cure of acne was in many cases very difficult, acne punctata being more rebellious than the other forms. The chief cause of acne he considered to be some error in assimilation. His attention had been directed to this by Dr. W. H. Draper, whom he believed to have been the first in this country to expound Dr. Bence Jones's views of gastric derangement dependent on suboxidation, especially of the farinaceous and saccharine elements of food. This state, in its connection with acne, had been repeatedly observed by both Dr. Bulkley and himself in Dr. Draper's clinic at the College of Physicians and Surgeons of New York, and abundantly borne out by the practice there.

The speaker had noticed the influence of exposure to climate in this disease in certain cases, where the salt air of Long Branch and Newport had greatly aggravated the eruption.

As to treatment, the acetate of potash regulates the stomach troubles very well, neutralizes the urates, etc. Locally, he thinks that active stimulation is required; and regarded the want of success following Dr. Sidney Ringer's sulphur lotion, as mentioned by Dr. Peters, to be due to the fact that it was applied too lightly; it should be rubbed in. He is in the habit of using the following:

℞. Potassæ fusæ, . . . ʒ ii;
Aquæ, ... ℥ iv. M. ft. lotio;

to be sponged over the face, allowed to dry in if not too painful, and washed off with very hot water; then rub in an ointment, as

℞. Hydrag. biniodid., . . gr. v;
Ung. simpl., ... ℥ i. M.

Or,

℞. Hyd. ox. rub., ... ʒ ss;
Ung. simpl., ... ℥ i. M. ft. ung.

He has also seen good results from iodide-of-sulphur ointment; also frictions with the green soap of the Germans, applying cold cream after washing it off. The following is also a favorite prescription with him:

℞. Lac sulphuris, . . . ʒ ij;
Spts. camphor, . . . ʒ ij;
Aquæ, ... ℥ iv. M.

The lotion to be rubbed well in with flannel at night, washed off in the morning, and a little cold cream applied.

Dr. T. called attention to what he considered rather an unusual form of acne, in which there were small papular elevations, quite salient, about one eighth of an inch in height and breadth, around the mouths of young women. They are associated with an hypertrophy of the fibrous tissue. These he had found very rebellious to treatment, but had removed them by destroying the whole mass, boring them from the apex with a stick of Squibb's pure nitrate of silver. This leaves a minute scar, which, however, is less than that resulting if the eruption is left to itself. He had tried the actual cautery, but not with as good effect as the nitrate of silver. The speaker did not think that acne was commonly associated with sexual troubles in young women.

Dr. S. Caro had met with a bad case of acne, where, after remedies of all kinds had been tried in vain, the patient went on a sailing trip, and her face became severely burned with the sun on the water, to the complete cure of her eruption. Following this suggestion, Dr. C. had concentrated the sun's rays by means of a lens upon the acne papules and pustules of another case, and caused them to disappear.

Dr. C. wished to comment upon Dr. Bulkley's statement that macaroni would produce an eruption of acne. He stated that in Italy, where macaroni was a chief ingredient of the diet of all, acne was rare; while in Rome, where it was less used, and almost not at all, the affection was common.

Dr. Bulkley explained that probably the outdoor life of the Italian peasantry enabled them to carry on the process of starchy digestion much better than those who led the sedentary and confined life of a city; and also that the manner of cooking in the city, with cheese, etc., greatly increased the indigestibility of the article in question; to which Dr. Caro assented.

Dr. J. L. Brown thought acne to be frequently a local disease. It can, however, be developed at will in most persons by overindulgence in certain articles, as buckwheat and greasy foods. He does not consider that there is any necessary connection between acne and sexual troubles in females, and has not found the affection very common among those treated for female disorders in the cliniques with which he is connected. He requested the president, Dr. Peaslee, to give his views on the matter, founded as they must be on a very extensive clinical experience of diseases peculiar to the female sex.

Dr. E. R. Peaslee said if a woman between twenty and thirty years of age, unmarried, called with acne, he should first inquire as to the state of the bowels, especially with regard to constipation. Next he should examine the state of the skin, whether dry and inactive or normal. Then the kidneys should be attended to, that their excretion was that of health; and lastly, he should, in absence of other predisposing or exciting causes, suspect sexual difficulties. Of these menstrual derangement would be first anticipated, uterine affections coming second. In married ladies we would expect to find in certain cases ulceration or congestion of the uterus, and these he could treat with a view to remove the acne, such cases being not at all infrequent with him. Dr. P. thought, however, that the uterus should be by no means assumed to be the cause of acne in the larger number of instances.

Acetate of potassa he has found serviceable in many cases, also pills of aloes and sulphate of iron, much the same

as those recommended by Dr. Bulkley. When the skin is inactive he gives spiritus mindereri. Above all, if uterine trouble exists, cure it, as many instances have occurred to him where acne disappeared after the cure of these affections, and in many cases which were rebellious to other treatment he has found some disorder of the uterus.

In conclusion, the speaker thought that there is a direct connection between sexual disorders and acne; but, on the other hand, women were subject to the eruption from the same causes which produce it in men, with the element of uterine difficulties superadded.

Dr. Bulkley, in closing the discussion, said he could not agree with those gentlemen who made acne a disease of young life, and rare after forty, referring to the statistics of his paper, where of 131 cases of all varieties, in which the ages were given, 26, or one fifth, had reached the age of forty years or over; one of these being sixty, another fifty-four, several fifty, and in all 10 had reached the age of forty-five or over, while only 28 were twenty years of age or less. Nor could he agree that those who first saw cases of acne were most successful in their treatment, as the majority of his patients had been under the medical care of others for varying periods, some of them for a long time; and again, he believed his treatment to have been more successful in the case of those more advanced in life. He also thought that much can be learned from the want of success of the practice of those who had seen the case before, as it is impossible to tell in every instance exactly what remedies will suit; as may be inferred from the number and variety of the means spoken of by those present, each one of which has undoubtedly cured many cases of acne.

Dr. B. wished again to call attention to the necessity of active exercise in the open air in these troubles, alluding to the smaller proportion of the sebaceous diseases in the private practice of Dr. McCall Anderson, of Glasgow, and the still less ratio in his hospital cases, caused no doubt by the active

outdoor life known to be a characteristic of the Scotch. The same accounts for the fewer numbers of these patients with Mr. Wilson and Startin, of London, the English being greater walkers than the Americans.

The speaker had used the hot-water and caustic-potash wash advised by Dr. Taylor, but not with the success hoped for, which indeed was much less than that afforded by the lotion of sulphuret of potash and sulphate of zinc given in the original paper.

Dr. B. would report further the treatment of acne with glycerine internally. He has now six patients taking it, one just commenced, in five of whom there is marked and rapid improvement. In one case, a scrofulous subject, the disease had been treated for many years, and never with success so prompt and great as with the treatment just given. Another case, of a youth aged sixteen, in private practice, who had been treated by him for some time with moderate success, improved greatly soon after taking glycerine, a tea-spoonful three times a day, after meals. He had been depending on Kissingen water to keep the bowels free. This and all other treatment had been stopped, and the glycerine had the effect to improve his health, make the bowels regular, and cause a decided change for the better in his punctate acne. The same treatment has also benefited a case of acne rosacea. The glycerine, when flavored with lavender and colored with burnt sugar, red saunders, and the like, not only is not objected to, but is very pleasant and much liked by those who take it. The improvement was much more rapid in every case than is wont to occur, and the patients were stated to have been much pleased with the treatment. Dr. B. intends to continue the use of the remedy in these and other patients, and to report the ultimate results.

Reviews.

Neuralgia and the Diseases that resemble it. By FRANCIS E. ANSTIE, M. D., Physician to Westminster Hospital and Lecturer on Medicine in the Westminster Hospital School.

A treatise upon this subject from any respectable source is acceptable, but from a reliable source it is a desideratum which the profession will very heartily welcome. Experience gives value to opinions, and position affords a stand-point from which those opinions will be recognized and accepted.

The nervous system, though a beautiful one, is intricate and perplexing to the general practitioner, while its especial and peculiar malady, neuralgia, thwarts and baffles and tries his soul like no other trouble in all the range of physic. Dr. Anstie has brought to the study of it uncommonly fine powers of observation and of reason, and we are doing simple justice to him and to them when we recommend the book as worthy the attention of the profession.

Dr. Anstie defines neuralgia as a "disease of the nervous system, manifesting itself by pains, which in the great majority of cases are unilateral, and which appear to follow accurately the course of particular nerves, and ramify sometimes into a few, sometimes into all, the terminal branches of those nerves."

Pain, he says, is "not hyperæsthesia; on the contrary, it involves a lowering of true function." It is due to a "perturbation of nerve force, originating in dynamic disturbance either within or without the nervous system; and the susceptibility to this perturbation is great in proportion to the

physical imperfections of the nervous tissue, *until* this imperfection reaches to the extent of cutting off nervous communications (paralysis)."

This then is the key-note to his philosophy: pain along the track of a nerve—pain, not hyperæsthesia—but growing out of perturbed action, which perturbed action is due to injury within or without the nervous system. Great confusion, he says, arises from failure to keep the distinction between function and action; function being nearly a constant quantity, action being any thing from slightest irritation up to tetanic spasm.

In regard to the history of neuralgia, he holds it as "universally true that the condition of the patient at the time of the first attack is one of debility, either general or special." That, although there may be "a ruddy complexion and a fair amount of muscular development," there is "debility, either structural or functional, of the nervous system." The attacks are always sudden, always intermittent or remittent, and in the onset characterized by increased arterial tension, "owing in all probability to spasms of the small vessels." "The final characteristic is that fatigue and every other depressing influence directly predispose to an attack, and aggravate it when already existing."

Neuralgia may arise from external *shock*—fall or railway collision; or from more direct violence—cutting or bruising wounds.

Of intra-nervous origin he holds to five sources: first, of malaria; second, of the period of bodily development; third, of the middle period of life; fourth, of the period of bodily decay; and fifth, neuralgia associated with anæmia and malnutrition.

Touching the period of bodily development, the remarks of Dr. Anstie are well worth remembering. "This is the period during which the organs of vegetative and of the lower animal life are growing and consolidating. The central

nervous system is more slow in reaching its fullest development, and the brain especially is many years later in acquiring its maximum of organic consistency and functional power." "From the moment that puberty arrives all is changed in the status of the nervous system. In the stir and tumult which pervade the organism, and especially in the enormous diversion of its nutritive and formative energy to the evolution of the generative organs and the correlative sexual instincts, the delicate apparatus of the nervous system is apt to be overwhelmed or left behind in the race of development. Under these circumstances the tendency to neuralgic affections rapidly increases."

Of middle life he claims general exemption from a *first* attack; it is not the "way in which a vigorous man's nervous system breaks down," and if he has neuralgia at all it antedates this period.

Of declining life the period is pre-eminently that of severe and incurable neuralgias. "Comparatively few patients are ever permanently cured who are *first* attacked with neuralgia after they have entered upon what may be termed the 'degenerative' period of existence."

To Dr. Anstie's classification of sick-headache among the neuralgias proper exception will be taken by a good many medical men. He says it is an "affection entirely independent of digestive disturbances in its primary origin, though it may be aggravated by their occurrence," and is the "most common variety of trigeminal neuralgia." Its first assault is during the period of bodily development, and under influences proper to this vital epoch the patient begins to suffer headache after any unusual fatigue or excitement, sometimes without any distinct cause. It is generally unilateral; and if the pain lasts any great length of time, nausea and vomiting are induced. The mechanical shock increases the pain, but presently it subsides and the patient falls asleep. The vomiting, however, does not indicate original gastric disturbance,

but grows out of the low point of nervous depression. By the act of vomiting the patient is simply deceived into the idea that his stomach was at fault, and pain grew out of indigestion, whereas it is pain which gave rise to nausea and vomiting. This is a condensed statement of the author's views of sick-headache, which we venture to say will be combated by ninety-nine in a hundred of the patients and nine in ten of the physicians whose lives have been wrung by this terrible malady.

In regard to pathology, Dr. Anstie claims that neuralgia has none in the "sense of definite anatomical changes always associated with the disease in a manner that we can exhibit or accurately describe;" and yet he is unwilling to admit that we "know less about the seat, the nature, and the condition of neuralgia than of other diseases." On the contrary, he believes "that we know more about it in all respects than we do of pneumonia." Writers, he says, talk loosely about its "protean" forms, whereas its "forms are by no means specially numerous." He claims that the "seat of neuralgia is the posterior root of the spinal nerve in which the pain is felt; and that the essential condition of the tissue of that nerve is *atrophy*, which is usually non-inflammatory."

As of pathology so of etiology. In neuralgia we have no "demonstrative causes." As there are no definite anatomical changes upon which to base a pathology, so also are there no demonstrative causes upon which to found an etiology. "They can not be considered apart—must be discussed together;" and in the entire chapter under this head the one is thoroughly interwoven with the other, and yet distinguishable enough. First in the order of mention—and, I think, in his opinion, first in importance—is "hereditary neurosis." Upon this point he has accumulated quite an array of cases, the result of long experience and special facilities, which ought to satisfy any one who is in doubt upon its transmissibility. Next in his enumeration is what he calls "mental warp," and

is the result of an imperfect system of education, particularly that line of education which gives undue stimulation to the emotions; for wherever there is stimulation there presently will also be depression, and this lies at the bottom of neuralgic tendencies.

Of the "peripheral influences," which are important factors in the production of neuralgia, he ranks "cold" as first. "The effect of a continuous cold draught of air is a frequent provocation of neuralgia; more frequently effective than blows, wounds, or temporary irritants of any kind, applied to the peripheral ends of sensory nerves." The *modus operandi* of cold and cold wind is simply this, that they "rob the nerves of force."

Next in order in the class of peripheral influences are "injuries to the trunk, or inflammatory processes or pressure by the growth of tumors, or destructive ulcerations; and here, like the influence of cold to the surface, that of wounds must be a depressing one to the center with which the wounded nerve is connected; and the resulting neuralgia must be regarded as an expression of impeded and imperfect nerve energy, *not* of heightened nerve function." Caries of the teeth, and the rare accident of malposition or abnormal growth of a "wisdom tooth," conclude the list of peripheral influences "of sufficient importance to be held as factors in the production of neuralgia."

Dr. Anstie discusses at some length the claimed relationship between neuralgia and rheumatism and gout, and the influence of "certain toxæmiæ," such as alcoholism, malaria, lead-poisoning, etc., in the setting up of neuralgia. Alcohol depresses and produces degeneration of the nervous centers. Lead poison is seen only in a special form of neuralgia, "if indeed colic be neuralgia at all." "Malaria is an utter mystery;" but by so much as we can see it appears plain that one of the most important features of the disease is a powerful disturbance of the spinal vaso-motor centers.

In regard to rheumatism he says: "I am willing to allow that there are a number of facts which superficially appear to countenance the idea of a close connection of this disease and neuralgia; but of these facts a considerable proportion consist of examples of inflammation of the nerve-sheath, with a certain amount of effusion in and around it, occurring in persons who have shown any symptoms which warrant the assumption of a general rheumatic diathesis." Such patients will be found to have exhibited not special rheumatic but special neuralgic tendencies in their past history. He then discards the assumed relationship, and says that the "common opinion could never have arisen but for the rage that exists for connecting every disease with a diathesis which the profession flatters itself that it understands."

He also rejects the claim which is set up for gout to any relationship to neuralgia proper, and quotes Eulenburg in support of his opinion; to which quotation he adds the "argument that it is exceedingly seldom that colchicum effects any good in neuralgia; a fact which is as unlike the relations of colchicum to true gout as any thing could be."

Touching syphilis, he says that "persons who are by inheritance highly predisposed to neuralgia may, from the general lowering of their health produced by a constitutional syphilis, become truly neuralgic simultaneously with, or subsequently to, the appearance of painful nodes;" but it is after all rarely concerned in the production of neuralgia.

To sum up, the author claims that in neuralgia there is "a material change in the nerve-root; and that peripheral influence, without special inherited tendencies, may suffice to set this process going."

That the disease is hereditary the author has been at great pains to place beyond reasonable doubt. The history of many cases has been collected which go to confirm the general opinion, lay and professional, upon this subject; and next to inheritance, the result of "close attention to the

pathology of neuralgia has been the conviction that there is no such frequently powerful factor in the construction of neuralgic habit as mental warp of a certain kind, the product of an unwise education." Then we have *cold* as an agent in its production, and wounds and the growth of tumors and the spread of destructive ulcerations.

In regard to its diagnosis, Dr. Anstie says the "essential characteristic of neuralgia is that the pain is either frankly intermittent or fluctuates greatly in severity without any recognizable cause." Second, the severity of pain is altogether out of proportion to general constitutional disturbance. Third, it is limited more or less distinctly to a branch or branches of a particular nerve. Fourth, pains are aggravated by fatigue or other physical or psychical agencies.

The treatment is summed up under four heads: 1. Constitutional remedies; 2. Narcotic-stimulant remedies; 3. Local applications; 4. Prophylaxis.

Under the first head he gives primary importance to diet. "Neuralgic patients require and greatly benefit by a nutrition considerably richer than that which is needed by healthy persons." Alcoholic liquors ought only to be given in "moderate doses, *and with meals*, as they thus aid primary digestion without inducing torpor." Quinine is given in liberal doses—from five to thirty grains. Fowler's solution is highly commended in doses of from five to eight drops three times a day; iodide of potassium, where there is syphilitic complication, in twenty to thirty-grain doses daily.

The perpetually recurring question of food—what sort and how much—is very sensibly discussed by Dr. Anstie; and in accordance with his opinions of atrophy and malnutrition as lying at the bottom of neuralgia, a system of generous diet very naturally suggests itself. "A large portion of food should be applied to the nutritive needs of the body; the nervous system unmistakably benefits thereby." He says there is a very common disposition in neuralgic patients to be nice and

dainty; and to develop an aversion—partly sensational, and partly the result of morbid fear about indigestion—for special articles of diet. Dr. Radcliffe pointed out their special neglect of all kinds of fat, partly from dislike and partly from fear that it makes them "bilious." Dr. Anstie says he can not too strongly express the benefits resulting from the persistent effort to remedy this state of things, and convert the patient from a valetudinarian to a hearty eater; and his success in this has always been most marked when he could secure a good supply of fat. Cod-liver oil is the form in which he prefers to give it, chiefly because it assimilates readily. But where one will not do try another; butter, cream, olive-oil. Of the *modus operandi* of fatty food there seems to be no certainty. Dr. Radcliffe regards it as a direct nutrient of nervous centers. Whether this is so or not, Dr. Anstie holds that the "enrichment of the diet by fat greatly assists the assimilation of food in general, and the patient's nutrition is thus improved."

Feed generously, and add as much fat as the patient can manage safely. "It is the indispensable basis of a sound treatment for neuralgias." Indeed, we would not be far out of the way to claim that it is the indispensable basis of judicious treatment of disease at large. Enrich the man; don't pauperize him. The bugbear of inflammation has stood in the way of liberal feeding, and has worried the patience of many an invalid whose digestion was good and whose appetite was unimpaired. The whole subject of feeding sick people needs revision. The propensity on the part of one class of teachers to starve out disease, and on the part of another class to ply the poor patient with questions as to "what will you have *now?*" "take this, and this, and this," to utter satiety, under the impression that unless he eats he must die—all this confuses the popular as well as medical mind, and calls for revision.

The narcotic-stimulant treatment has several types; all agreeing, however, in this, that in "small doses they appear

restorative of nerve-function, in large doses *depressors.*" The opium type directly antagonizes pain and produces sleep. The belladonna type *relieves* pain in a much less degree, and is not at all certain in procuring sleep. The chloral type is purely hypnotic, and stands by itself. The bromide of potassium stands alone also in its power to "check psychical excitement directly (through the circulation) and indirectly (through the production of sleep)."

The hypodermic injection of morphia is advocated upon the ground that small doses may be frequently repeated without interference with the digestive organs. This suggestion will be doubted by many. It is certainly contradicted by the experience of some of us.

Under the head of prophylaxis we have six divisions: "1. Psychical, which embraces many considerations touching home and school education; 2. Defects of nutrition; 3. Mismanagement of the muscular system; 4. Sexual irregularities; 5. Over-fatigue of special senses and insufficiency of sleep; 6. Unhealthy atmosphere and climate."

We have thus run over some of the chief points in Dr. Anstie's most interesting and valuable book; and whether the profession accepts all his pathology or not, the work will repay a careful perusal. J. J. S.

A Manual of Histology. By Prof. S. Stricker, of Vienna; assisted by Th. Meynert, F. von Recklinghausen, Max Schulze, W. Waldeyer, etc. Translated by Henry Power, London, and James S. Putnam and S. Orne Green, Boston. Edited by Albert H. Brucke, Assistant Aural Surgeon, etc. New York: William Wood. 1872.

The work before us is well gotten up, on good paper and type, and with pretty fair wood-cuts. The translation, partly from that of the New Sydenham Society, is excellent in every

respect. The American editor tells us in his preface that Prof. Stricker is one of the foremost histologists of the world. We have not been disposed to rank him so high, but he belongs to a class of scientific investigators, numerous in Europe, in which he is becoming distinguished; and, though as an authority he can not be named with Virchow, Rindfleisch, Flint, Hammond, Hyrtl, Luschka, Bennet, Rokitansky, Cohnheim, and some others, we hail his work as a valuable contribution to the literature of the subject of which it treats.

The author very truly says, in his preface, that "opposition fosters the spirit of inquiry;" and we believe he will have a good deal of opposition. At the congress of German naturalists, held last year at Leipzig, Stricker made quite a fiasco. Profs. Rindfleisch and Cohnheim, who were present, among others, were not at all convinced of the truth of Stricker's *assertions.* The *Wiener Allgemeine Medizinische Zeitung*, in an article on the above-mentioned facts, says *that the scientific men will always distrust Stricker's works.* The work before us gives proof of the correctness of this statement. We are not the least prejudiced against Prof. Stricker, but science demands to be treated in an honest and convincing way, and not for the advancement of a mere clique or school.

To show what real scientific investigations are, we would mention Virchow's Cellular Pathology, which has recently appeared in a new dress. At the time when Cohnheim stirred up the scientific world by his work on inflammation, every body thought it was the death-blow to Virchow's Cellular Pathology; but, as Virchow had already said, "*omnis cellula e cellula*," his book can appear to-day with but a few slight alterations. His conclusions have not been shaken, but have stood the test of the most extensive researches and keenest criticism. Whether Prof. Stricker's works will fare as well remains to be seen.

There are but three articles from the pen of Prof. Stricker in the work before us, which treat of the general method of

investigation, the general character of cells, and the development of simple tissues. As the book is intended for a text-book for students on histology, we are sorry that the "general methods" of investigation are not dealt with more at length. We would ask the American editor whether he thinks that with those few explanatory pages a student may rush into histology?

The second article, on the general character of cells, adds nothing new, except mere hypothesis, to Virchow's excellent work on cellular pathology. Pasteur has disproved the hypothesis of equivocal generation; and we certainly agree with Bruecke that the essential architectural elements of the cell, etc., are completely beyond our grasp. Stricker asks: "Is the opinion justified that the important discovery of Henle of the spontaneous growth of the rete mucosum can be shaken?" We answer that not only is the opinion justified, but that recent experiments by Gorup, Besanez, and others have disproved Henle's assertions. In such things we confess we are skeptics and do not accept any hypothesis, but want the absolute proof from the highest authority. Spontaneous origin, perpetual motion, and descent of man from the gorilla have so far made fiasco.

The development of simple tissues, the last article contributed by Prof. Stricker, will be more thoroughly criticised by us in a future article, the space allowed to us now not being sufficient.

The article on the brain of mammals, by Prof. Meynert, is excellent in every respect; and so are also the contributions of Max Schulze, Recklinghausen, Kuhne, Rollet, and Waldeyer. All have our highest approval. The bibliography of the works used is thorough, and will help new investigators a good deal. The remainder of the manual is mostly written by pupils of Stricker; in itself not bad, but lacking a certain amount of thoroughness, and also full of Stricker's peculiar hypotheses.

The work with all its faults is, we repeat, to be considered a good one; and we think it must be regarded as a good sign for the American medical profession that such works as Prof. Stricker's are translated and published, and, as we hope, widely sold and thoroughly studied in this country. C. P.

A Text-Book of Pathological Histology: An Introduction to the Study of Pathological Anatomy. By EDWARD RINDFLEISCH, Professor of Pathological Anatomy in Bonn. Translated from the second German edition, with permission of the author, by WILLIAM C. KLOMAN, M. D., assisted by F. T. MILES, M. D., etc. Philadelphia: Lindsay & Blakiston. 1872.

The name of the author of this work is familiar to all medical scholars on this continent and in Europe. Professor Rindfleisch is a profound thinker and investigator, and he has achieved, though comparatively young, the enviable fame of a leading authority in his special branch of medical science. Men like him, Virchow, Cohnheim, Flint, Da Costa, etc., have done much toward elevating medicine into a real science, and to banish from it more and more crude empiricism. We feel under obligation to the translators and publishers for having given us the opportunity to read in our language the investigations of Prof. Rindfleisch. The rendering into English, it is true, is not always so good as we should like to see, but the meaning nevertheless is always clear. We who know the difficulty of translating medical books can pity the translators, who sometimes get for all their pains nothing but blame.

There are but few works extant on pathological histology. The manual of Coenil and Renoier, in French, lacks correctness, and its scientific researches can not always be relied on. We feel embarrassed at the thought of attempting to criticise so able a work as the one before us in the little space allotted

to us. The work is dedicated to the well-known Vienna surgeon, Billroth, and is destined to help the advanced student through the mysteries of pathological histology, and prepare him for scientific investigations. Speaking, among other things, of anomalies of the mucous membranes, the author uses the following language, which we quote to show how eminently practical is his work:

"It is yet questionable whether the right will be conceded to me from all sides of treating the things which I purpose considering in this chapter under the superscription of a hemorrhage. Attention was already called formerly (pp. 240 and 335) to this, in how far the vascular arrangements of the stomach and intestine brought with them a certain disposition of the gastric and intestinal mucous membrane to hyperæmia and hemorrhage. We there found in the more active contractions of the muscular structure, which may even occur in slight catarrhs, but especially characterize dysenteric catarrh, a motive for the exit of blood either into the parenchyma of the mucous membrane or at its surface. Now, there are at the gastric and intestinal mucous membranes a number of *losses of substance*, which most probably are all to be traced back to a hemorrhage which has occurred—a hemorrhagic infarction of the mucous membrane. This is commonly received for the *hemorrhagic erosions*. We understand thereby certain deficiencies of the mucous surface, of the size of a pin's head, round and sharply defined, which are present in large number, and by preference occupy the summits of the folds in the pyloric region. The very frequently simultaneous finding of just as large infiltrated places, yet hemorrhagic, beside the erosions causes in these cases every doubt as to their origin to disappear. Immediately preceding vomiting may also commonly be demonstrated as the cause of the hemorrhage, so that we may, in fine, represent the affair to ourselves in the following manner: the act of vomiting leads, by the temporary stagnation of the blood's efflux, to small hemorrhages from the superficial venous trunks of the gastric mucous membrane; therefore at the summits of the folds, because here in the extremest parts of the extent of the stagnating current the blood pressure must be at its highest.

"The extravasated blood-corpuscles infiltrate a circumscribed section of the mucous membrane in such a measure that the blood-capillaries are compressed, and nutrition ceases with the circulation.

The hemorrhagic infarction becomes a *caput mortuum*, its organic connection with the healthy mucous membrane is destroyed, and the actual separation only a question of time.

"If, however, we reflect that the gastric juice dissolves such dead portions with facility, as we have them in the hemorrhagic infarcted mucous membrane, we will find it conceivable that already but few hours after the hemorrhage, instead of the infarction, we will meet with those clean, sharply-defined losses of substance that Cruveilhier called erosions hæmorrhagique."

The readers will see for themselves that the descriptions, even for the inexperienced student in histology, are plain and easy to be understood.

Professor Rindfleisch's remarks on specific inflammation—1. Typhus; 2. Tuberculosis (meaning tubera of mucous membranes)—the chapters on anomalies of the lungs, tuberculosis, croupous pneumonia, anomalies of the liver, kidneys, etc., are unique in every respect. The same may be said of his explanation of *rigor mortis*, which he calls the first step toward death; but a step which can be again recalled will be read with equal interest.

In the chapter on leucæmia, a condition of the blood described simultaneously by Virchow and Bennet, in 1845, he gives due credit to the German pathologist for having immediately recognized and explained it in its essential significance.

In conclusion, we would say there is not a page of this work where something interesting will not strike the reader; and even the busy practitioner may in hours of leisure profit by the perusal of most of its chapters. We venture the prediction that it will be found soon on the table of every progressive physician. C. P.

Clinic of the Month.

THE GENERAL PRINCIPLES OF SKIN THERAPEUTICS.—Dr. Tilbury Fox has recently contributed to the London Lancet a series of papers—all of great interest—on cutaneous therapeutics, from the last of which we make the following extracts:

"I have still to take up the question of the general principles of treatment to be followed in regard to the third class of diseases—those in which the skin is diseased as a direct consequence of disturbance of the general nutrition. *General* treatment is every thing, *local* treatment of little value *comparatively*, in these cases. I have nothing to say as regards the acute specific diseases, the eruptions of which are secondary matters, and require no treatment.

"As regards the case of disease of the skin dependent upon the existence of special diathesis, there is a general agreement as to the modes and methods of treatment appropriate to each. The strumous diseases are met by cod-liver oil, iron and quinine, and good food; the syphilitic by mercurials and iodide of potassium; and so on. But there are one or two practical considerations calling for particular notice. In the first place, I would say that, as a rule, in treating skin disease strumous tendencies of the middle-aged and the old are overlooked; in fact, in many skin affections the minor evidences of constitutional disturbance are apt to be missed. An individual who has been very strumous in early age retains, to a greater or less extent, the tendency to free pus-formation, etc., in later life, though it may not be so strongly marked or coincidently exhibited in connection with conditions which at

an earlier age are regarded as indicative of struma. Whenever I find in the middle-aged or old free pus-formation out of proportion to the degree of inflammation—that is, when I can not account for the free pus-production by the intensity of an inflammation, and this is attended with exuberant flabby granulation in ulcerations—I regard the case as one in which struma plays an active part. I treat my patient accordingly, and successfully as a consequence. In addition to the strumous, syphilitic, and leprous diatheses there are other states—call them cachexias—that need to be more generally regarded as leading directly to disorders of the skin; lead-poisoning is one. I have seen unhealthy ulcerations come on in persons who were suffering from saturnine poisoning which healed up under the treatment appropriate to the latter. But perhaps this should have been referred to under the head of medicinal rashes. Then again there is the so-called 'dartrous diathesis,' the nature of which I am wholly at a loss to comprehend from a study of the writings of the French. I suppose it is the gouty diathesis; but I know of no eruption directly due to gout. Skin diseases may be influenced and modified by gouty habit of body, and this has been referred to in discussing the therapeutics of Class II. The herpetic diathesis I do not understand, unless it be 'rheumatic.' The alteration of the general nutrition consequent upon malarial poisoning I think in some cases plays a direct part in inducing skin mischief, and especially attacks of pemphigus and bucnemia tropica, or elephant leg. The appropriate remedies in such cases would be quinine and arsenic and iron of course; and all the diseases named are relieved by these remedies.

"The connection of malarial poisoning with skin disease is a matter deserving attention. It is a question how far Delhi boil and its allies are connected with malaria. I own, of course, malarial poisoning may hereby act as a debilitating agent, and give a patient afflicted with a cutaneous disease less chance of recovery than a person free from the effects

of its operation upon him; and I see many cases in those returned from abroad in proof of this. The skin affection may be due in consequence of a part of the malarial mischief; but at present our information on this point is any thing but satisfactory; yet I feel sure time and further observation will show that there is the closest connection between the two. The 'keloid diathesis' may or may not exist. In some cases the tendency to the development of keloid tumors in all parts of the body is marvelous; and the same may be said of 'fibroma,' but this may be due to a peculiar disposition on the part of the fibro-cellular textures of the skin, deranged—over-stimulated in some cases—by climatic influence acting upon it, and disposed thereby to undergo change, a disposition independent of the general state of the blood. The evidences, however, at present in our possession are insufficient in proof of the existence of a 'keloid' or a 'fibromatous' diathesis. It must be shown that these, if diatheses, are hereditary before I can accept them as diatheses.

"Neurotic diseases are daily assuming an increasing importance, and properly so. They are connected with definite conditions of general ill-health, and deserve a notice here. Pemphigus, herpes, in some cases general pruritis, and very likely true prurigo, are illustrations. The principles of treatment involve the removal of over-work and fatigue of the body and mind, attention to the tendency to general deterioration of the tissues of the body, which is frequently present, and general wasting of the body; the securing of due rest, change of scene and air, as well as the institution of a special system of neuro-tonicism. It is in these cases that arsenic is frequently beneficial. The sympathetic nervous system is probably particularly involved in such diseases as pityriasis rubra, where hyperæmia seems to be due to a loss of tonicity in the vessels, itself consequent upon disorder of the sympathetic system, the more clearly evidenced by the coincidence of hyperæmic conditions of important internal organs largely

controlled by the sympathetic, and also the general character of the cutaneous hyperæmia. In these cases 'general debility' is particularly marked, patients do not seem to be able to 'pick up' strength, and specially to assimilate; and it is only by the most careful tonic regimen, and by care being taken that the powers of the body are husbanded, that recovery can be brought about.

"Lastly, I think that we shall in course of time come to recognize that the lymphatic system is much concerned in skin diseases. No doubt it is itself disordered as a consequence of the operation upon the whole body of certain potent influences of ex-malarial poison; but it has yet to be determined how far in certain cases it may be primarily at fault, as in scleroderma. Thus I think that in all cases where the fibro-cellular structures of the skin are specially involved—fibroma, keloid, elephantiasis, etc.—we should seek to determine how far the sympathetic system is concerned primarily or secondarily in the disease. Quinine is a potent agent for good in all cases in which the lymphatics are actively involved in diseases of the skin, whether primarily or secondarily.

"A few words are necessary about the local treatment of skin diseases immediately dependent upon or part of a general derangement of the system. The remedies should be used with similar intention as in the case of local applications spoken of as regards Class II. After all, they are quite subsidiary; and I will only say that when used to remove exuberant growth, or to heal ulcerations, the best time to begin their employment is when internal medicines are just beginning to make an impression on the disease. If the general condition upon which depends the development of an eruption or an ulcer be left uninfluenced by internal treatment, the use of irritants or caustics will often tend to spread or to favor the outbreak of fresh mischief, as might be anticipated. The exuberant granulations of a strumous sore, or the unhealthy ulceration in syphilis, are especially aided in

their disappearance or their healing by the mercurial plaster or other application used in conjunction with the internal remedy at the time that the latter has begun to improve the general condition. However, this is self-evident. But I do think that local applications are sometimes the cause of harm simply because they are too much trusted to for the cure, and are not subordinated, as regards their use, in due time to general remedies. The use of soothing applications in neurotic diseases to allay local irritation due to general causes is necessitated by the discomfort of the patient and the harm likely to be done by reflex action, etc.

"From the foregoing observations I hope it will be evident that the treatment of diseases of the skin consists in something more than the prescription of arsenic. I have asked one after another, 'Why do you give arsenic?' and the invariable answer has been, 'Well, one does give it, you know!' or 'Well, what else shall we give?' I have attempted to prove that it is impossible to formulate a particular treatment for a particular disease; *i. e.*, to say this or that man has this or that disease, and therefore he must have such and such treatment. He requires a combination of medicamentation suited not only to the disease itself, but also to his individual peculiarities and concomitant circumstances; and it needs all the knowledge and tact of the physician to make this combination happily. In regard to local measures, I am certain that they frequently do harm, from the injudicious employment of stimulants and astringents where simple soothing means are called for; but, thanks to our advancing knowledge of therapeutics, better principles begin to prevail."

Obstetrical Paralyses of Infants.—Dr. Nadand* considers at length the different paralyses observed in infants resulting from uterine action alone, and therefore termed *spontaneous*, or from the use of instruments, or from certain

**Paralysies Obstetricales des Nouveau-nés.* Paris, 1872.

maneuvers of the accoucheur. Examples of paralysis of the facial nerve, six in number, are given. In two the paralysis was spontaneous, in the others resulting from the application of the forceps. If the paralysis does not disappear in two or three months, use electricity, at first faradization; but if it does not produce muscular contraction, then use the continuous current, occasionally trying the former to ascertain whether muscular contractility has been restored; and when it has the continuous current should give place finally to the induced.

Several examples of paralysis of the arm, resulting some from the use of the forceps, others from maneuvers of the obstetrician. There too the treatment is chiefly, if not exclusively, the use of electricity. "In the cases seen at advanced stage of the disease, when the muscles and the bones have already undergone marked atrophy, it is well at first to use the continuous current, which seems to have a more energetic action upon the nutrition of muscles and bones. When these organs have recovered a greater vitality, when contraction occurs under the faradic current, this should be used exclusively."

Three examples of obstetrical paralysis of the inferior members are detailed. Dr. N. states: "Notwithstanding the encouraging prognosis given by celebrated authors having my opinion upon the cases I have reported, I persist in believing that paralyses of the inferior members are very serious, for they are ordinarily symptomatic of a profound lesion of the cerebro-spinal organs. The infant soon dies."

The Cold-bath Treatment in Acute Disease.—After treating six cases of enteric and typhus fever by the cold bath, Dr. Alexander Collie, of the Homerton Fever Hospital, says (London Lancet):

"These cases are too few in number to justify any definite statement as to the indications for or against the cold-bath treatment in acute disease. There is no evidence that the

course of these specific fevers is shortened by such treatment. On the contrary, the evidence points rather the other way; but in this may consist its chief remedial value, as the pace of the disease is, as it were, modified, so that the system gets regular intervals of rest, and is thus enabled to bear up against what might otherwise be fatal. This is not by any means a novel mode of treatment; for as early as the year 1702 Floyer strongly recommended it, and in 1729 Hoffman said that, 'employed freely and not too cold, it is the best remedy in acute disease, and in chronic diseases one must prefer it to all other means.' From this time to 1801 it was advocated by the German authorities, Sigismund, Hahn, Unzer, Zimmermann, and others, when a new impetus was given to it by Dr. Currie, who adopted this treatment very extensively and successfully at the early part of the present century. It must, however, be remembered that Currie began his treatment often before a correct diagnosis could be made; and there is no evidence in a large number of his cases that the febrile states would have developed into any serious specific febrile disease. This practice did not continue long; and, excepting isolated observations—such as those of Drs. Wilson Fox, Stallard, and Weber—it has in this country ceased to be employed by the regular profession in acute diseases. It is of great importance to determine not only that cold-water baths will reduce temperature in certain well-defined acute diseases, but whether this reduction of temperature is followed by other good results."

On the Treatment of Epilepsy.—J. Thompson Dickson, M. D., of London, whose position, as Lecturer on Mental Diseases at Guy's Hospital and Physician to the Infirmary for Epilepsy and Paralysis, entitles his opinion on the subject to very great weight, recently contributed a paper to the London Lancet on the nature of epilepsy. The central idea of this communication was to establish that the only rational

system of treatment was that which aimed at the removal of the cause. He endeavors in each individual case to discover and remove the cause of irritation. He says:

"The cause varies in every subject; therefore its discovery in each individual case becomes the first duty of the physician toward his epileptic patient. Acting on this idea, and associating with it the conclusions drawn from experiment and observation, I found that in respect to treatment epilepsy divided itself into two distinct classes corresponding with its cause; and that induced or primary epilepsy was often amenable to remedies, while hereditary or secondary epilepsy was radically incurable, but often susceptible of modification and such alteration as to afford the patient much relief.

"In the primary or first class of cases ranks epilepsy from depression of bone after a fracture of the skull. In such a case I should not hesitate to recommend trephining, and I should persist in this no matter at what date after the injury the epilepsy occurred. In cases also of epilepsy occurring after blows on the head, without visible or tangible fracture, I should still recommend trephining, for the purpose of relieving thereby the pressure produced by a possible fracture or thickening of the tabula vitrea, or, what is more likely to have resulted, a thickening of the dura mater. Before resorting, however, to trephining in cases wanting in tangible or visible depression, notwithstanding the history of a blow or injury, I should first exhaust the treatment by absorbents, using the iodides and bromides, either separately or together, or chloride of ammonium; and, failing to produce result with these medicines, I should employ bichloride of mercury in very small doses; but unless a good effect was very speedily produced I should not push the drug, but resort to the trephine. The same medicinal agents—namely, the chlorides, iodides, and bromides—may be used with happy results in the cases in which cause can be traced to either alcohol or syphilis. Under the prolonged use of alcohol the cerebral

membranes will thicken and produce epilepsy, which will disappear with the prolonged use of absorbents; and syphiloma of the cerebral membranes no doubt is as obedient to the influence of absorbents as syphiloma of other structures, though from the nature of the case absolute evidence in this is wanting. The cases in which I have suspected syphilis as the cause of the epilepsy, and which I have treated accordingly, have for the most part recovered. In the cases in which history and symptoms lead to the conclusion that cancer is the cause it may be taken that the case is hopeless; and the same observation applies to cases caused by bone tumors or bone nodes growing in the skull, of which I have seen several instances.

"The next set of cases are those in which the urine is albuminous. The blood of persons passing albumen with their urine is watery and poor and irritable to the brain, and will often produce epilepsy. If the flux of albumen can be arrested, the epilepsy will disappear. The epilepsy of parturient women is of this kind, and must be dealt with accordingly. The epilepsy of toxæmia is usually, though not necessarily, fatal; that of uræmia, for instance, which always kills before long, even though the patient may rally after the earlier attacks.

"The epilepsy of exhaustion and insufficient supply of blood to the brain is of a more hopeful character. Organic heart disease may thus be the cause of epilepsy. One case I saw in which the patient, unconscious of any ailment, attempted to climb Mount Blanc, but was seized with epilepsy during his ascent. On examination it was found that he had a regurgitant mitral valve, and the irregularity of his circulation on reaching a moderate altitude sufficed to bring about the epileptic phenomena. Treatment in such cases must of course be adapted to circumstances, and efforts must be directed toward the heart, not toward the brain. In the case of menorrhagia, a not uncommon cause of epilepsy, the

indication is plain. I have in such cases found Indian hemp a most valuable remedial agent; but cod-liver oil, iron, and nourishment in every form, must be had recourse to.

"Another set of cases are those in which the excitement has its origin in the peripheral extremity of a nerve, in which case the plain indication is to remove the cause if it can be discovered. If a nerve is involved in a cicatrix, and a touch of the cicatrix produces a fit, one stroke of the knife will in all probability supply a radical and permanent remedy. If carious teeth are the excitants, they ought to be removed; or surface irritation of any form must be treated locally. If the irritation arises from intestinal worms, their evacuation will in most cases be speedily followed by a disappearance of the epileptic phenomena. And this brings me to the point at which special and general treatment overlap one another. Epileptics are frequently the subjects of constipation; and, conversely, constipation, especially in children, is one exciting cause of epilepsy. Therefore it is essential to watch the bowels of epileptics closely, and secure their regular action. For this purpose drugs of severity must be used, but they must be always such as will produce a good action without depression. A saline combined with a stomachic, as sulphate of magnesia and ginger, will be found most serviceable. Such a simple remedy will often keep in check an epilepsy of hereditary origin. Aloein and jalapin are also valuable remedies. In hereditary epilepsy, however, the treatment is much more general than special; and the patient must be closely watched and studied, particularly as regards the time of the recurrence of the attacks, which often exhibit a marked periodicity, especially when the neuralgic form is assumed. The first indication is to nourish the brain. Many of these cases are attacked in the morning on rising; the moment of getting out of bed is often the time of attack. In such cases my practice is to order the patient to take a cup of coffee and a biscuit before attempting to get out of bed.

In cases where the attacks are nocturnal much benefit will be derived from a light but digestible meal before retiring to rest. It should be remembered that animal substances are more digestible than vegetable. A little meat is a better supper for an epileptic than gruel or bread, and a little stimulant in addition to the meat is often of value. I knew one patient, a lady, the subject of epileptiform neuralgia occurring in nocturnal attacks, who was always relieved on the consumption of a meal, which not unfrequently consisted of a rump-steak and a glass of stout. This treatment, of course, requires caution and watching.

"As regards remedial agents, so far as this set of cases are concerned, very few are of any use, except perhaps belladonna—a drug that should be persevered in, as by keeping the vessels of the medulla oblongata congested it reduces to the minimum the hyperexcitability of the cerebral vessels, which are so ready to discharge themselves into the medullary veins, and thus the attacks may be warded off. The quantity administered must be gradually increased, as the patient soon becomes tolerant of the drug. It is well to begin with one eighth of a grain of extract, which I usually order to be made into a pill with one eighth of a grain of the powdered leaf. This should be taken an hour before the attack is expected, if the fits are periodical; if, however, the intervals are uncertain, the pill should be taken night and morning, and again in the middle of the day if necessary. The patient will soon be able to take two or three pills for a dose; but he must be carefully watched, and the drug suspended from time to time, and small doses resorted to on recommencing its use. In a fair percentage this treatment will arrest the recurrence of the attacks, not a small boon to the sufferer; and so successful has it proved in my hands that I am inclined to attach considerable importance to it.

"It is right that I should, in conclusion, mention the fact of the power of mental impressions on epileptics. The idea

of a new doctor will often ward off the attacks for two or three weeks; for which reason my invariable rule with new patients is to order at first a bottle of water, or of camphor-water or mint-water, and persevere in this until the charm of novelty has worn off. Until then it is unwise to push any drug with specific object, while the time gained by the mint-water treatment enables the physician to study all the phases of his patient's case more accurately."

Treatment of "Persistent" Inflammation.—Mr. John Marshall, Professor of Surgery in University College, London, in a recent lecture *(ibid.)*, laid special stress on the value of the local application of solutions of the oleate of mercury and morphia in the treatment of prolonged inflammation. The oleates are prepared by adding the oxide of mercury, recently made and well dried, to oleic acid, aided by a temperature of 300° F. The strength of the preparations used is indicated by the percentage of the oxide of mercury which they contain. The five-per-cent. solution is a clear, pale-yellow liquid, resembling olive-oil, but thinner; the ten-per-cent. solution is also fluid and perfectly clear, but as dark as linseed-oil; while the twenty-per-cent. preparation is an opaque, yellowish, unctuous substance, closely resembling in appearance resin ointment, melting very readily at the temperature of the body, and forming a kind of transparent, viscid, colorless varnish when applied to the skin. The chief care to be observed in the manufacture of these solutions is not to hurry the process, and not to employ a high temperature, or the mercury will be immediately reduced.

"Unlike the mercurial ointment so long in vogue, which is a crude, gross, unscientific mixture, very dirty and very wasteful, because so small a proportion of its mechanically-admixed mercury is but slowly absorbed, these solutions of oleate of mercury are cleanly and economical in use; and as the diffusibility or penetrating power of oleic acid is much

greater than that of ordinary oils or fats, and as each one thousandth part of even a minim of these preparations contains its proper modicum of mercury, they are absorbed by the skin with remarkable facility, and manifest their remedial effects with great promptitude. They should not be rubbed in like ordinary liniments or embrocations, but should be *merely applied with a brush, or be spread lightly over the part with one finger;* otherwise they may cause cutaneous irritation, or even produce a few pustules on the skin, especially in certain persons. This result may, however, be obviated by the addition of a small quantity of olive-oil or purified lard, according as an oleaginous or an unctuous preparation is required. Any of these forms may be scented by the addition of essential oils.

"In employing these mercurial solutions for combating persistent inflammation of joints, I soon found that the addition of morphia was of very great advantage. For this purpose the simple alkaloid must be used, as neither the hydrochlorate, the acetate, nor the meconate is soluble in oleic acid. For every drachm of the solution of oleate of mercury in oleic acid one grain of morphia may be added. Being, as well as the mercury, completely dissolved, it quite as rapidly penetrates the skin, comes quickly into contact with the extremities of the nerves, and thus, even within a few minutes, acts upon them at their most sensitive points, and speedily produces a soothing effect.

"The oleates of mercury and morphia, thus united in one preparation, represent, as it were, a liniment, ointment, or plaster of mercury and opium; but they are far more elegant, economical, and efficacious. As a rule, according to the size of the part affected, from ten to thirty drops are sufficient for one application. This should be repeated twice daily for four or five days, then at night only for four or five other days, and afterward every other day, until a cure is obtained. The morphia immediately begins to relieve pain, allays the nervous

irritation and consequent vascular turgescence, and thus arrests the progress or 'persistence' of the inflammatory process, while the mercury probably promotes the death and degeneration of the morbid products, and so facilitates their subsequent removal by absorption. Unless used in excessive quantity, the oleate of mercury does not salivate or produce any marked constitutional disorder.

"I recently tested in the hospital the value of these combined oleates in the treatment of a case of 'persistent' inflammation of the knee-joint. This affection, I need hardly say, is often difficult to cure, on account of the large size of the articulating surfaces, ligaments, and synovial capsule; and also on account of the great weight supported at the joint, and the frequent disturbance of the parts in the unavoidable movements of the limb and body. Frequently indeed this disease leads to irreparable injury to the knee. In the case in question, occurring in a man aged forty-four, the disease had already lasted upward of eighteen months. From effusion into and about the joint the knee was greatly swollen and disfigured; there was not only synovitis, but in addition inflammation and thickening of the fibrous capsule and the ligaments of the joint. He complained of great and constant pain, of a creaking feeling or noise when the knee was moved, and of occasional starting pains at night, probably indicative of threatened or actual softening of cartilage. The skin over the knee was œdematous and deeply stained with iodine, the remedy which had chiefly been relied upon before his admission under my care. After this stain had been removed, from twenty to thirty drops of the solution of oleate of mercury and morphia (five per cent. of the former with one grain of the latter to the drachm) were applied to the knee night and morning for about ten days, and then at longer intervals. A piece of linen was kept around the joint; over this was put a smooth, thick layer of cotton-wool, and then the limb was rather firmly bandaged from the foot to just above the knee.

During this treatment the patient, who was of course confined to his bed, rapidly improved in all respects; and at the expiration of four weeks he left the hospital able to walk by the aid of lateral leather splints, and very far advanced toward a cure. From the first day of their application the effect of the remedies was decided and prompt. I could adduce many other examples equally satisfactory.

"I will now advert as briefly as possible to the use of these same preparations of mercury and morphia in the local treatment of 'persistent' inflammation affecting other parts or organs of the body. Indeed their applicability and utility appear to me to be almost co-extensive with the occurrence of such inflammations themselves, provided only that the seat of the disease be in or sufficiently near to the skin.

"I may first mention that not only in persistent articular inflammation, but also in simple synovitis, these remedies rapidly relieve the tenderness and pain, and promote the absorption of the fluid effused into a joint. They are also of decided benefit in the rheumatic, the arthritic, and the mixed forms of joint disease; but in these they do not of course supersede the necessity for general treatment. In inflammation of the mammary gland occurring during or after lactation, or altogether independently of that secreting process, their efficacy is unequivocal; for I have seen not only the induration left after previous abscesses speedily disappear under their use, but a tendency to recurrent suppuration in the site of old abscesses, and the threatened formation of new ones, entirely controlled and arrested. I have also seen a threatened absence in the perinæum from inflammation of one of Cowper's glands, and likewise the troublesome indurations left after ordinary perineal abscess, rapidly disappear on the use of these preparations. In obstinate and painful tonsillitis, in epididymitis, in periostitis, and in inflammation with imminent or actual suppuration in or around lymphatic glands, I have similarly employed them with decided advantage. In

hydrocele they have not appeared to be useful. I have used equal parts of the twenty-per-cent. ointment and purified lard applied outside the eyelid, with success, in hordeolum and in palpebral conjunctivitis.

"In many cutaneous affections the oleate of mercury solutions, without morphia, form elegant and powerful remedies. It was in a case of obstinate sycosis menti that I first used, and with excellent results, an ethereal solution of the perchloride of mercury mixed with oleic acid; but I now much prefer, as equally efficacious and far less irritating, the five-per-cent. solution of oleate of mercury in oleic acid, with the addition of an eighth part of ether. This, when applied to the skin with a camel's-hair pencil, is a most diffluent and penetrating remedy. It enters the hair-follicles and the sebaceous glands, penetrates the hairs themselves, and carries every where with it its powerful metallic constituent. Besides sycosis, it will cure chloasma and the various forms of tinea. It is useful in porrigo and in pruritis ani et pudendi; but I have not found it serviceable in non-specific psoriasis or in eczema. The solution of oleate of mercury destroys pediculi immediately; and, owing to its singular power of permeation, simultaneously kills the ova—a result not always certain when ointments containing undissolved mercury are used.

"Again, in many of those syphilitic affections for the cure of which mercury is applicable the oleate-of-mercury preparations offer some advantages. Thus, in congenital syphilis, a piece of the twenty-per-cent. ointment about the size of a pea or bean placed in the child's axillæ night and morning for five or six days, rapidly and easily, and without any sign of uncleanliness, produces constitutional effects. Even in the adult this mode of introducing mercury into the system, either for the cure of syphilis or other disease, may often be preferable to, and less troublesome than, the bath; and it certainly gets rid of the objections to the ordinary mode of inunction. As a topical remedy for certain local manifestations of syphilis,

such as the non-ulcerated forms of syphiloderma—especially when these disfigure the head, face, neck, or hands—the ten-per-cent. solution is a most valuable adjunct to other treatment, the spots rapidly disappearing under its use. This or the twenty-per-cent. preparation, diluted with equal parts of purified lard, may also be applied to non-ulcerated syphilitic indurations and condylomata; but it gives pain if applied to surfaces much excoriated or ulcerated, to moist warts, or to mucous membranes. In syphilitic iritis, and also in non-specific forms of that disease, this diluted oleate ointment smeared over, not within, the eyelids evidently promotes the absorption of the effused lymph. Lastly, in some of the remoter kinds of syphilitic affections, which iodide of potassium will usually cure, such as very hard nodes and certain forms of syphilitic testicle, the external application of the oleate of mercury is very valuable. I have seen a case of enlarged testicle and epididymis, the syphilitic origin of which had not been suspected, and for which no mercurial course had been prescribed, but which during a period of six years had been from time to time relieved by enormous doses of iodide of potassium, speedily and decidedly benefited by the inunction of the twenty-per-cent. mercurial oleate.

"In reference to other uses of the combined oleates of mercury and morphia, I may remark that I can not doubt their value in the treatment of 'persistent' inflammation of certain internal parts and organs—as, for example, of obstinate pleurisy, pneumonia, pericarditis, and endocarditis; for they would here also allay pain and nervous irritation, would thus contribute toward the arrest of progressive disease, and would likewise promote the process of absorption. Moreover, I may state that a solution of morphia in oleic acid (one or two grains to the drachm), without mercury, is an excellent typical remedy in neuralgia, and in that exquisitely painful affection, herpes zoster; care being taken not to produce cutaneous irritation by friction. I have also used ender-

mically, with advantage, a solution of atropia in oleic acid, and have had prepared for me the oleates of zinc and copper. Each of these preparations will probably come to have its uses, to which, however, I have now only time thus generally to refer. Oleic acid is likewise a ready solvent of cantharidin and croton-oil. It is itself aperient, and permeates fæces more readily than olive-oil. Indeed, I fully anticipate that this acid, as well as its compounds with mercury and with morphia, besides other preparations made by its aid, will eventually be admitted into the pharmacopœia. An ointment of the oleate of mercury would almost supersede the old-fashioned blue ointment, while the solutions of the oleates might replace the liniment of mercury. The remaining mercurial ointments of the phermacopœia, of which the nitrate may contain a little oleate or some allied salt, will, however, still have their special uses."

Duration and Treatment of Acute Rheumatism.—After giving a summary of five cases of acute rheumatism, which recently had been under his care, Dr. Hanfield Jones remarked *(ibid.)* it is clear that acute rheumatism has not a fixed period of continuance, but is, on the contrary, subject to very considerable variations. The question then arises, On what conditions do these variations depend? To some extent possibly on the time which elapses before a case comes under treatment, but to a very much greater extent on the *quality* of the individual system. Some systems present a much greater resisting power to morbid agencies than others, succumb when they are overborne only for a short time, and then rapidly spring back again to health; others when once depressed are very slow to regain their former status. Advanced life and debility, however induced, favor the latter condition. Predisposition to a particular disease must also be taken into consideration. Some are prone to gout, some to rheumatism, some to Bright's disease, and some to fatty degeneration;

and whatever that predisposition may consist in, the man who is predisposed to rheumatism will succumb more readily to acute rheumatism and recover more slowly than a man who is not. Therefore, as it is difficult in any given case to form a definite estimate of the strength of a man's constitution, or of his degree of debility, as well as of his predisposition to disease, it is a very difficult matter to determine beforehand the duration of an attack of rheumatic fever.

The next question is, What are the circumstances which should direct the physician to a choice of *remedies?* These also admit of only vague definition. In some measure they depend on the same circumstances which influence the duration of the disease. It is almost certain that as soon as the *urine* becomes alkaline (and it is so sometimes from the commencement) the use of alkalies will be not only useless, but injurious. Still more certainly will it be so if the perspiration also be alkaline or neutral. If, on the contrary, the urine be highly acid and rather scanty, alkalies are very likely to be serviceable. When there is great thirst, with a dry, clammy mouth, alkalies in an effervescing form are very grateful. The state of the *pulse* is important. If it be very weak and soft, alkalies are contra-indicated. This is especially the case if at the same time the skin yield a copious flow of neutral sweat. In such cases quinine in full doses is very often of great service. Not unfrequently a mixed treatment of alternately-given quinine and alkalies, as practiced by Dr. Garrod, is productive of much good. In a recent case of a woman who was very weakly, anæmic, menorrhagic, much distressed, restless and half delirious at night, with a high temperature, that treatment was followed in four days by almost entire freedom from rheumatic pain, and by greatly-improved sleep, although the temperature remained high for many days afterward. The condition of the *nervous system* should be noted. When it is irritable bromide of potassium and repeated subcutaneous injection of opiates afford more relief than any other

measure. *Blisters* are allowed by Dr. Gull and Dr. Sutton as valuable agents in relieving suffering, though they do not curtail the course of the disease. But they are not suited to cases in which there is not much inflammatory swelling, although the pain and intolerance of movement be very great. They add to the nervous irritability, and may advantageously be made to give place to continuous poultices, medicated perhaps with laudanum or an alkaline solution. *Purgatives* containing calomel or podophyllin, or extract of colchicum, should always be given at the outset, and repeated according to need if the tongue be foul, the taste perverted, and the patient loathe food.

For the *pains* which are apt to linger *about the shoulders and arms* after all febrile action has ceased, the subcutaneous injection of atropia will generally be found to be the best remedy, but sedative liniments are often useful.

As to *food*, the leading of the appetite should be followed. It can be of no use to intrude on an unwilling stomach food which it can not digest; but as soon as the patient desires solids he should have them. Until then soups and milk and such like food are essential.

A high temperature appears to be rather an indication for giving than withholding *stimulants*, and wine should always be given during the febrile stage if the patient be low.

The Treatment of Itch.—Dr. Tilbury Fox says *(ibid.)*: "We talk of papular, vesicular, and pustular scabies; whereas the scabies itself is only the acarus in its burrow—the cuniculus with the vesicle at one end (the result of effusion set up by the entrance of the acarus), and the imbedded acarus, showing itself as a white opaque speck, at the other end. All else is merely secondary to the irritation set up and the scratching practiced for its relief. The papules are erected and congested follicles, the pustules suppurating follicles; and these papules and pustules occur as a part of many other

diseases in which the skin is subjected to severe irritation. Kill the acari and the secondary eruption disappears of course. But what do we do usually? We treat not only the essential disease, the real scabies—namely, the acarian furrow and its imbedded ova and acari—but also the secondary results in the same manner, applying to them the same parasiticide. Yet we should treat the former by parasiticides and the latter by soothing remedies; the more so as we know that the acari are generally to be found in certain localities. In recent cases in adults the localization of the acari to the interdigits and the region of the wrists is complete; and it is easy to do harm by intensifying the secondary irritation, though the original cause (the acari) may be destroyed by our remedies. Therefore I say in recent scabies use the parasiticides—sulphur or storax, petroleum, benzine, or the like—to the wrists and interdigets, and simple unguents to other parts. In chronic scabies the case is different, for here the acari may be more or less ubiquitous as regards the body. But even here a distinction is to be made: the parasiticide should be applied to the small and fine rash, and not to the ecthymatous pustules. Error number one, then, in the treatment of scabies, which is often made, is the application of parasiticides to 'the wrong place.' Error number two is the use of too powerful parasiticides. We need only use half a drachm of sulphur to the ounce of lard. There is no occasion for a stronger ointment nor for hellebore ointment. Gentle friction for a long time with a milder preparation is all that is required. Error number three is the use of parasiticides for too long a time. The use of a parasiticide for two or three days should be followed by a good washing and the discontinuance of the remedies for a night. If the patient be not troubled with itching during the night, he may conclude that the acari are killed; and all we need do is to guard against the hatching out of fresh acari by the light application of our parasiticide once a day to any 'pimply' places for a few days longer, taking care that the

foul clothes are well heated or scalded. It often happens that the remedy used to destroy the acari is continuously used until it sets up on its own account severe irritation, which is mistaken for an increase or spread of the scabies. 'Not too strong and not too long' is my rule for the use of remedies in scabies. The occurrence of red, rough, erythematous patches is a sign that the remedy itself is creating a disease. I do not like sulphur baths. Do n't use them in recent cases. You need only treat the hand with parasiticides. In our new baths we shall cure our patients at a sitting, and disinfect their clothes at the same time; but in private practice you must follow the old-fashioned plan. I prefer for ordinary use an ointment made of half a drachm of sulphur, five grains of white precipitate, ten drops of oil of chamomile, and five drops of creosote, to one ounce of lard. For chronic scabies sulphuret-of-potassium baths or an iodide-of-potassium lotion, one drachm to six ounces of water, are good; but I like the first-named remedy as well as any. Should we disinfect the clothes? Yes, by strong heat. I can not *prove* to you that the clothes convey infection, but I believe it better to be on the safe side."

Thoracic Aneurism.—Dr. A. T. H. Waters, of Liverpool, in a clinical lecture on this subject *(ibid.)*, based on three cases of the disease which he had recently treated, says:

"The great object to be kept in view in treatment is the consolidation of the aneurismal sac, and to effect this absolute rest is, in my opinion, the most important means we can employ. You know the effect of the recumbent posture in diminishing the frequency of the pulse and retarding the circulation, and thus giving increased facilities for the deposit of fibrin. I think therefore that rest affords the best chance of producing a cure, as far as cure is possible; but it must be perfect and prolonged. The patient should not be allowed to rise from the recumbent posture for many weeks, and the

bed on which he lies must be prepared with this view. No doubt this is very irksome, and it is difficult to get patients to submit to such treatment. A restricted diet, including a small quantity of meat daily, should be also insisted on, and very little fluid should be allowed. Thirst, if present, may be relieved by occasionally sucking lumps of ice.

"With regard to the use of medicinal substances, given with the view of producing fibrinous deposits, iodide of potassium has of late years been somewhat in favor with the profession. I have now used it in several cases; and although I can not speak very confidently of its value, it has yet appeared to me to be of service. It should be given in large doses—twenty grains three times a day; and I have never seen it produce any injurious effects, although I have continued it for months. I think it is a remedy which you ought to exhibit, considering the favorable results which have in many cases followed its use. It may exercise a beneficial influence on the diseased blood-vessels. Acetate of lead has been recommended. I have tried it, but can not speak in its favor. I have seen good results from the application of ice to aneurismal tumors.

"There are certain laryngeal and asthmatic symptoms, which are apt to come on in connection with aneurisms within the chest, about which I must say a few words. From pressure of the tumor on the pneumogastric or its recurrent branch, or on the air-passages, a reflex spasm is often produced. This may be either laryngeal or bronchial, and is sometimes so severe as to threaten suffocation. I have seen more than one case in which laryngeal spasm of this kind has been supposed to indicate disease of the larynx, attention being thus called away from the actual malady. I have seen a most violent attack, resembling in every respect an asthmatic seizure, produced by an aneurism pressing on the trachea. If therefore you are called to cases of this nature, examine the chest carefully; and should you fail to discover any signs of thoracic tumor, aneurismal or otherwise, do not

pronounce an opinion before you have made an examination with the laryngoscope. If disease of the larynx is present, you will detect it; if not, you will be strengthened in the view that there is some internal tumor. These acute attacks of dyspnœa usually pass off, but they may often be cut short by the inhalation of chloroform. The laryngeal spasm is apt to assume in some cases the form of chronic laryngitis, and against a mistake in diagnosis you must be on your guard.

"In connection with these attacks of dyspnœa the question of performing tracheotomy may arise. It is well that you should have clear notions as to what tracheotomy can effect in such cases. If the dyspnœa were due to spasm of the glottis, dependent on pressure of the pneumogastric or its branches, undoubtedly tracheotomy would give relief; but such spasm generally yields to other measures, or passes off without treatment. When, however, the dyspnœa results from pressure of the tumor on the trachea itself or a bronchus, it is obvious that the operation can do no good, except in so far as there may be laryngeal spasm. Opening the trachea might under these circumstances give some relief and prolong life for a short time; but the operation should only be performed after careful consideration, and after the nature of the hoped-for relief has been fully explained to the patient or his friends."

Notes and Queries.

"On the Half-shell."—The "Gold-headed Cane" tells the following of Dr. Baillie, a nephew of John Hunter, a most popular and distinguished practitioner of the last century.

During his later years, when he had retired from all but consultation practice, and had ample time to attend to each individual case, he was very deliberate, tolerant, and willing to listen to whatever was said to him by the patient; but when in the hurry of great business, when his day's work, as he used to say, amounted to seventeen hours, he was sometimes rather irritable, and betrayed a want of temper in hearing the tiresome details of an unimportant story. After listening with torture to a prosing account from a lady, who ailed so little that she was going to the opera that evening, he had happily escaped from the room, when he was urgently requested to step up stairs again. It was to ask him whether, on her return from the opera, she might eat some oysters. "Yes, ma'am," said Baillie; "shells and all."

The last Illness of Sir Isaac Newton.—Early in the month of March, 1726, Mr. Cheselden and Dr. Mead, who then wore the "Gold-headed Cane," were called to see Sir Isaac. Says the "Gold-headed Cane:"

"On our first interview it was pronounced that the illness of Sir Isaac arose from stone in the bladder, and no hopes were given of his recovery; and yet to look upon the great philosopher, though now in his eighty-fifth year, he had the bloom and color of a young man; had never worn spectacles nor lost more than one tooth during his whole life. Besides

being blessed with a very happy and vigorous constitution, he had been very temperate in his diet, though we did not learn that he had ever observed any regimen. He was of middle stature, and at this time plump in his person; had a a very lively and piercing eye, a comely and gracious aspect, and a fine head of hair, as white as silver, without any baldness; and when his peruke was off he had truly a most venerable appearance. On inquiry we found that for some years before his present illness he had suffered so much from the same disorder that he had put down his chariot, and had gone out always in a chair; had left off dining abroad or with much company at home. He ate little flesh; lived chiefly upon broth, vegetables, and fruit, of which latter he always partook very heartily. Notwithstanding his present infirmities had been gradually increasing upon him, nothing could induce him to absent himself entirely from town; and he had continued to go occasionally to the Mint, although his nephew had for the last year transacted the business there for him. It appeared that on the last day of the preceding month he had gone to town, in order to be present at a meeting of the Royal Society. On the next day Mr. Conduitt told us that he had seen him, and thought he had not observed him in better health for many years; that Sir Isaac was sensible of it himself, for that he had told him, smiling, that he had slept the Sunday before from eleven at night to eight in the morning without waking; but that the great fatigue he had endured in going to the Society, in making and receiving visits, had brought his old complaint violently upon him. He had returned to Kensington on the Saturday following. This was the statement we received, and we found him suffering great pain. But though the drops of sweat ran down from his face with anguish, he never complained or cried out, or showed the least signs of peevishness or impatience. On the contrary, during the short intervals between those violent fits of torture he smiled and talked with my master with his

usual cheerfulness. On Wednesday, March 15th, he seemed a little better, and some faint hopes were entertained of his recovery. On Saturday, the 18th, he read the newspapers, and held a pretty long discourse with Dr. Mead, and had all his senses perfect; but at six o'clock on that evening he became insensible, and remained so during the whole of Sunday; and died on Monday, the 20th, between one and two o'clock in the morning."

A Hasty Treatment for Quinsey.—Dr. Radcliffe, the first owner of the "Gold-headed Cane," was a man of expedients as well as humor, as is shown by the following.

He was once sent for into the country to visit a gentleman ill of a quinsey. Finding that no external nor internal application would be of service, he desired the lady of the house to order a hasty-pudding to be made. When it was done his own servants were to bring it up; and while the pudding was preparing he gave them his private instructions. In a short time it was set on the table in full view of the patient. "Come, Jack and Dick," said Radcliffe, "eat as quickly as possible; you have had no breakfast this morning." Both began with their spoons; but on Jack dipping once only for Dick's twice a quarrel arose. Spoonfuls of hot pudding were discharged on both sides, and at last handfuls were pelted at each other. The patient was seized with a hearty fit of laughter, the quinsey burst and discharged its contents, and my master soon completed the cure.

Sudden Death after Delivery.—Dr. C. Hale, of Whitesville, Ark., narrates a case of sudden death, it was believed, from heart-clot, occurring between two and three hours after the completion of a natural labor. The patient was rather delicate, had had five children previous to this labor, and in some of her confinements had flooded. Proper precautions had been taken to prevent this accident, including the admin-

istration of ergot and opium, and, after delivery, uterine compression and ice externally. Nevertheless, it occurred about an hour after the completion of the labor, but was soon arrested. "The pulse could not be felt, nor could either heart-sound be heard, only a confused, churning, rumbling noise; but the impulse was decided. The patient complained of 'smothering,' and her lips were livid. She died an hour and twenty minutes after the commencement of the hemorrhage, death being sudden and quiet. *Rigor mortis* was complete in a very few minutes. There was but the simple attack of hemorrhage, and that was not so great as to produce complete syncope. I am induced to believe that the partial faintness was the cause of the formation of a heart-clot, which gradually increased until circulation was completely arrested. This hypothesis would explain the pulseless condition, the consciousness continuing up almost to the very moment of death, the absence of the normal cardiac sounds, the peculiar rumbling or churning noise, and the very decided cardiac impulse."

A New Medical Journal.—"The Archives of Scientific and Practical Medicine," edited by Brown-Séquard, M. D., assisted by E. C. Seguin, M. D., is a very beautiful monthly of one hundred pages published in New York and Philadelphia, by J. B. Lippincott & Co., at four dollars a year. The names of the editors afford a guarantee as to the quality and tone of the Archives, which we need hardly add will at once take their place among the standard medical periodicals of the day.

THE AMERICAN PRACTITIONER.

MARCH, 1873.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

ON DIET.

BY E. R. PALMER, M. D.,

Professor of Physiology in the University of Louisville.

There are probably but few questions bearing upon the subject of social and domestic economy about which so many conflicting views are entertained and so much of ignorance countenanced as that of diet. For many years the cry has gone up from prudent physicians and anxious parents against the "debasing evils of gluttony;" and successive generations of enlightened men have long been trained from infancy to look upon an honest and hearty gratification of the mandates of their stomachs, and upon the cultivation of a knowledge pertaining to dietetics, including an insight into the manner of properly preparing food, as little less than sensuous epicureanism when indulged in by those who do not pursue catering and cooking as a life-business. We are being told daily with great truth, from the pulpit and the press, that ours is a momentous age; that our day is witnessing the

overthrow of long-existing beliefs in nearly all departments of theology and science. The observant man indeed need not be told that crises various and startling are being reached and grappled with in every department of knowledge. These transitional tendencies of the times are making their impress upon the written and spoken thoughts of leading men in every calling.

Without doubt the most important advance which general science has undergone during the present century has been the evolution of the theory known as that of "the correlation and conservation of forces," by which it has been shown that heat, light, electricity, and magnetism are simply different phases of a common natural force which is in itself indestructible. More recently this theory has been extended so as to embrace as well the so-called "vital forces;" a belief in which comprehension has been accepted by all the most eminent physiologists of the time, though it has met and still meets with strong popular opposition. A discussion of the theory of correlation thus applied, while manifestly pregnant with interest, would hardly be in place in this connection, and I shall therefore confine myself to such simple statements as seem necessary, preparatory to what is to be written upon the question of diet.

The eminent English physiologist, Dr. Carpenter, has recently shown,* by an elaborate article on the subject of correlation of forces, that not only organic growth and nutrition are due to the operation of force received from the physical world, but also that organic action, embracing common sensation, motion, the higher senses, and mental action arise from the same common source. The same views have also been advanced by Herbert Spencer, Tyndall, Huxley, and numerous other English scientists, and have met with the ready acceptance of the British Scientific Association. In Germany

* Correlation and Conservation of Forces. Grove, Hemholz, Faraday, Liebig. Carpenter. D. Appleton & Co., 1872.

they are, if possible, more universally held, while many fellows of our own Scientific Association, and quite a number of American writers, give in their unqualified approval. Among these latter Prof. Flint, jr., in the fourth volume of his elaborate treatise on Physiology, has plainly asserted his belief in the highest application of the law of correlation.

That man, made out of matter, should be subservient to the same force which matter in its inorganic state manifests, is certainly plausible, is indeed demonstrable; but *how* this takes place, or what the rationale of these metamorphoses is, are "mysteries which it is impossible to fathom."

Plants, the ultimate source of all our organic food, produce their tissues by a process of deoxidation; and animals subsisting on the matter thus produced oxidize it, casting out the resulting compounds to be again decomposed by the vegetables, and thus the two kingdoms mutually support one another. According to the views expressed, force is perpetuated in our bodies and clothed with the characteristics called "vital" by this oxidation in the blood and tissues of the structural elements of which they are composed; and it therefore more than ever becomes a matter of prime importance that we should familiarize ourselves with the chemical composition of the various tissues which enter into our formation, and the proper source and best means for preparing the materials which, as food, are consumed to supply matter to the various parts. They teach us, in other words, to place even a higher estimate upon diet and air than has heretofore generally been held.

If all the varied phenomena of life are due to changes in the material structure of the body, then the purity and vigor of these phenomena will be in a direct ratio to the quality and quantity of food taken and assimilated; and what we eat and digest takes the place of spirit and spontaneity, not only in the manifestations of heat, light, motion, and electricity, which characterize living animal structures, but is also

elevated virtually into the "throne of reason," and constitutes the real "food for thought." Certain it is that when we compare the poetry of men like Kirke White with that of more generous livers, we are forced to confess that the mind's costliest web is better and more richly spun from substantial than from ethereal food. As a rebuke to the popular prejudice and indifference which have long united to repress man's tendency to so-called epicureanism, a popular writer has recently asserted, with startling truth, that out of the forty millions inhabitants of the United States not more than one million are uniformly well and sufficiently fed. The present superiority of the white race has long and justly been attributed to the advantages in the way of food which are peculiar to the temperate zone; while the mental inferiority of our semi-civilized and barbarous brothers of the frigid and torrid zones have in a like manner been attributed to an insufficient variety of diet, it being in the one almost, and in some instances exclusively, of an animal nature, and in the other vegetable.

Several series of experiments have of late been instituted to test the amount and kind of food necessary for various conditions of vital activity. The result has been full of interest, and shows that of the two, mental labor outranks physical as an exhauster of tissue at a ratio of four to one; in other words, that one hour's severe mental labor is equal in its destructive influence to four of active physical exertion. It would seem as if the human family had long felt this, as it were, by intuition; and thus we find, as we ascend the scale of intelligence, more care taken in the selection and preparation of viands, and more time given to eating and sleeping, at least by those who are ordinarily judicious. The coarse, ill-prepared, and scanty meal of the day-laborer would by no means suffice for the repair of those inroads which mental labor has made into the brain of the student.

It is a popular and erroneous notion that hard students

are usually small eaters. This fancy has arisen from the fact that such persons are quite commonly abstemious during severe and even protracted mental labor. They either knowingly or instinctively feel that the great mass of blood can not at such times be spared from the brain to the stomach for purposes of digestion without lowering, for the time being, the desired degree of mental vigor. It is after such hours of toil that the literary man, as a rule, enjoys with rare relish and appetite such a quantity and quality of food as is well calculated to restore his flagging powers soon and thoroughly. Gatherings of men of letters are now, and have been from time immemorial, closed in the banqueting-hall, where huge feats in gastronomics are the order of the occasion.

Finally these investigations have shown that the ordinary table-fare of any well-conducted family in easy circumstances *contains all the elements necessary for the proper maintenance of every part of the organisms of those who eat thereof.* I have purposely italicized the foregoing sentence because of its apparent conflict with the assertion that of the American people only about one fortieth are properly fed. I hope to show before I am done wherein the chief faults in the dietetics of our country lie, and to give at the same time certain general rules for the management of the diet of the sick.

The chief errors which conspire to bring about an unscientific and hurtful system of dietetics are daily manifested in the selection, preparation, serving, and eating of food as accomplished in the vast majority of intelligent families. Beef and bread, being the richest of all food in tissue-making elements, are justly regarded as the most important and useful staples of diet; and yet only a small percentage of those who do the marketing for the families of which they are members can answer correctly as to those qualities which characterize the best beef and flour. On three fourths of the butchers' stalls in our markets and meat-stores cattle scarcely two years old, with the natural warmth hardly out of their bodies, are

retailed daily to many hundred customers of high and low degree, notwithstanding that such meat is tough, tasteless, and innutritious. Steaks, which constitute the most generally-purchased cuts, are so thin as to stand not the slightest chance of escaping being transformed by the cook into a dish calculated to tax to the uttermost the digestive faculties, without being able to give in return more than an insignificant quantity of inferior nutriment.

The best beef is that which has attained from four to six years' growth, at which age the muscles are rich, sweet, and fully matured. Such cattle should be rapidly fattened, and then killed as long before consumption as can be done without running the risk of actual decomposition. In the winter a week's time is none too long. Such beef is tender to the very neck, and should be cut into thick steaks and large roasts; these in turn not to be robbed of the fat that is attached to them.

The frugal man or woman will soon find that such beef is in the long run decidedly the cheapest. I do not know indeed that it is not the truest wisdom and economy in the poor man to spend every cent he can possibly spare from his income for food, always buying the best; as by so doing he is obtaining one of the chief agents concerned in producing all his vital manifestations, by which his income, if he works for it, is obtained, while the other agent (air) is given him for nothing.

Nor are we much less at fault in our selection of flour and bread. The popularity of whiteness, at least so far as these articles of our food are concerned, leads nearly all housekeepers to select that brand of flour which makes the whitest bread; not knowing that the capsule of the wheat-kernel, which gives a darker hue to less thoroughly bolted flour, contains by far the largest percentage of the materials best adapted for the nutrition of bone, muscle, and brain, while the interior of the grain consists of little else than starch.

Those who from necessity or preference buy their bread from the city bakers rarely fail, in the course of a year, to consume many loaves which are inferior and indigestible. In several years' experience I have found but one baker in the city who makes bread that is uniformly of unexceptionably superior quality.

A similar degree of care is essential in the selection of every other article of food. Veal is to be avoided as a regular article of diet, owing to its being hard of digestion and but poorly endowed with nutritive qualities. Lamb is inferior to properly-fattened mutton; and mutton, like beef, is more commonly offered for sale of an inferior than of a superior quality. The same rules should govern in its selection. Wild meats, which are relished as a change, are generally digestible, and are nutritious; but one soon tires of them. Ham properly cured will frequently prove acceptable to delicate stomachs when fresh meat does not. As a rule, however, it is less digestible and beneficial than good beef.

Unlike other meats, domestic fowls are the sweetest soon after they are killed; an excellent method of preparing a chicken for dinner being to kill and dress it in the morning, and then pack it in ice so as to thoroughly extract its heat by the time it should be "put on." Turkeys likewise are much more palatable if eaten soon after they are killed.

Fresh vegetables are too often, especially in cities, fresh only in name. They are prone to wilting or incipient decay, and should be served as soon as possible after they are gathered. Potatoes (Irish), so popular and so largely consumed as food, contain less than twenty-five per cent. of nutritious matter. Their usefulness as articles of diet has frequently been questioned by scientific men.

In the foregoing remarks enough has certainly been said to show the importance of exercising great care and wisdom in the selection of what we eat; and it is a well-known and important office of the physician to teach the public how to

avoid physical evils, and to make the best of those means which are at its command for sustaining and promoting the physical, intellectual, and moral vigor of society. It has been wisely said that to insufficient and poor food, far more than to any one thing besides, are attributable the crime and sin which stalk through the land.

But if we err in our purchases of food, how much more are we at fault in its preparation. Here undoubtedly it is that the strongest blow is struck for the impairment of nutritive matter. The labor question in all its importance has no more serious problem to be solved than the domestic. Our ancestors had the advantage of an old and established system of labor, and were accustomed to train up from early life several of their servants in the mysteries of the kitchen; so that many manor-houses had their meat, bread, and pastry cooks each devoted solely to her branch of the art. Now-a-days all is changed; and our kitchens, wives, and dinners are at the mercy of irresponsible and frequently ignorant menials, who come and go like veritable Bedouins. Disagreeable as this fact is, it yet undoubtedly can be made the means of great good, if the public will only awaken to both the necessity and the means. It is a patent fact that the commander of great armies must needs have more than a theoretical idea of discipline and drill; and he is the best general who, all other things being equal, is best versed in every thing pertaining to his calling, even down to the manual of arms.

Such also should be the qualifications of every housewife. She should have received before undertaking, or else gain as speedily as possible after, marriage a practical knowledge of the whole art of cooking. Not that the good housewife should be expected or even allowed to do her own cooking. Far from it; her duties are of a more exalted nature; but, like the general, her judicious orders and instruction can exert an influence for much good.

As for the men, too many of them are afraid of being

ridiculed as cooks, and the rest are too deeply immersed in their life-duties to take much interest in kitchen-work; and yet I am by no means certain that they too may not find benefit from an occasional tour of inspection into that realm. Of one thing I am convinced—namely, that to be a good physician one must know a great deal about cooking.

The experience of several years in the study and observation of dyspepsia has convinced me that many of the accepted theories regarding its causation and treatment are wide of the mark. I am satisfied that most cases, while they may have had their cause in bad cooking or rapid eating, are, when they fall into our hands, simply instances of incipient or chronic starvation; and, acting upon this principle, I am in the habit of feeding such cases, and with the happiest results. I have known bad dyspepsia cured by a week spent away from home, at literary and scientific conventions, where feasts more substantial than those of "reason" and flows less ethereal than those of "soul" have played a prominent part.

The first step in the path of error common to writers on digestion is that of tabulating food according to its supposed digestibility. The attempt to compile such tables, and apply them to even the minority of cases, is eminently unscientific. I have known breakfast-bacon to be relished and digested when rare roast-beef could not be borne. So too the popular system of dieting dyspeptics upon special dishes, such as cracked wheat, mush, dry toast, beef-tea, *et id omne genus*, is based upon an incorrect knowledge of the patient's wants; and the sufferer recovers, if at all, in spite of his physician. We have heard a great deal of late years about allowing patients, and especially children, to choose from fancy or a generous board whatever they most crave, and eat it, though it be bacon and cabbage. Many instances of recovery are recorded following such license, which is a natural rebound from the beef-tea plan. To my mind, the better, and indeed the best, plan is that of tempting them

with the choicest food, cooked with perfect skill and served in an artistic manner.

Space will not allow me to report numerous cases which I have in remembrance. The following is one of considerable interest. A mother of five children, so reduced by chronic dyspepsia as to weigh but sixty pounds, had been successively given up—once as the victim of tabes mesenterica and once as the subject of incurable dyspepsia. To use her own words, she had "taken every medicine under the sun." Her alvine discharges were frequent and yeasty, and vomiting occurred after every meal. She loathed medicine and craved all sorts of food. She was starving to death. This was ten weeks ago. Since that time I have seen her twice a week. But little medicine has been given, and that with questionable benefit; but I have overhauled, time and again, her diet; have racked my brain in the suggestion of a proper variety of easily-digested and attractive food; and have fed her alternately on rare roast-beef, rare broiled beef, and venison, birds, fowls, cream, buttermilk, crackers, bread with old port wine, increasing gradually from day to day the amount consumed, and avoiding as far as possible every semblance of medication. It was six weeks before I found out that bad bread was causing the yeasty stools. To show the influence of the mind in such cases, she asked for an apple, and I told her she could have a jenneting nicely baked. At my next visit I learned that her stomach had at once rejected it; and when I expressed my surprise and regret, she replied: "The fact is, Doctor, it was n't what I wanted; I wanted a raw and not a baked apple." She has gained in the last four weeks five pounds, much strength, and a fine start in convalescence.

It is too commonly the case that the physician orders broiled steak or roast-beef, and then gives himself no further concern as to the choice of cuts and manner of preparation and serving. No wonder that his prescription proves hurtful or inefficient in so many cases. In but a small minority of

households are the first principles of either broiling or roasting understood, and especially with reference to the latter are so many respectable cooks profoundly ignorant. The bane of American cookery is that popular and barbarous utensil, the frying-pan. It is used on all occasions, and may be seen any day upon thousands of kitchen-stoves half filled with boiling lard, in which sputters either the fresh or salted meat that is to form the chief constituent of the daily meal. I know of no meat which is not the worse for such treatment. Even ham is infinitely sweeter and more digestible when properly broiled over coals. Any physician of tact can undertake the reform of such usages in his families without fear of giving offense.

In the matter of serving we are also far from exhibiting wisdom commensurate with the times. Jumbled dinners piled promiscuously upon the domestic board are a retrogressive change from the system of courses once more generally practiced. The simplest dinner is rarely so frugal but that it will admit of a division into two or three courses; and then the want of care and taste which are so often manifested in the table-ware and linen, and the absence of every thing calculated to embellish the various dishes, that they may please the eye as well as the palate. What is more delicious to the thirsty man than pure cool water from a *clean glass;* and how rarely do we have clean glasses offered us for such purposes! The very fact of glass being so difficult of thorough cleansing should all the more spur one's efforts to make it so. If these apparently little things are worth considering for those in health, how much more are they of importance in the dietetics of the sick-room. I have seen the feeble convalescent turn away appetiteless from good food because of a soiled napkin, a dim goblet, or a promiscuously-crowded plate; and I have beheld with pleasure the flash of agreeable surprise greet from the same sick-chamber the snowy linen and garniture of bright green leaves or fragrant flowers or

tropical fruit that had been tastefully placed about the pure white china and wholesome food.

LOUISVILLE.

AMPHO-DIPLOPIA CURED BY OPERATION.

BY D. S. REYNOLDS, M. D.

On the 18th of November, 1869, I was consulted by a fine, hearty lad, aged fourteen years, who related the following history, which was confirmed by his father, viz.: in the month of June last, while in perfect health, and in the enjoyment of perfect vision, he fell from a gravel-cart, receiving by the fall severe shock and some unimportant superficial bruises about the head and shoulders. Consciousness was restored in something like an hour after the fall, when he saw every thing double; the double vision being still present in a very annoying form, so much so that he can not go even along the sidewalks of the city without a guide.

The eyes looked perfectly healthy; no abnormal deviation of the optic axes; pupils readily responsive to light; the recti muscles acting in perfect harmony. When asked to count my fingers, two being held before him, he said he could not, as there appeared to be "a thousand." When the left eye was closed he saw every thing double with the right; when the right eye was closed he saw with the left a single object so greatly multiplied as to place it entirely beyond his power of enumeration.

Examination with the ophthalmoscope gave an entirely negative result, the papillæ and retinal vessels presenting a perfectly normal appearance; in fact, not a trace of intra-ocular disease existed. There was, however, slight rotary unsteadiness observed in examining the disc of the left eye.

The double vision in the right eye and multiple vision in the left, with the rotary oscillation above mentioned; the absence of perceptible deviation in the optic axes, with no evidence of intra-ocular lesion, and no irregularities in the corneal curvature; the obliquity of the images in the right eye, coupled with the fact that the images were divergent from the horizon upward, made it tolerably clear to my mind that the diplopia was entirely dependent upon a contraction of the *superior oblique muscle* of the right eye.

The diagnosis made, I was not a little puzzled to determine the proper plan of procedure in an attempt to relieve my patient. I was afraid to undertake division of the affected muscle. He had already been subjected to long-continued constitutional medication by his family physician, who had also, I heard, tried electricity. Taking all these facts under advisement, I concluded to attempt the cure by an effort to deprive the contracted muscle of all assistance derived from its associate, the superior border of the internal rectus, and at the same time re-enforce the antagonistic power of the inferior oblique. After expressing my doubts as to the result of an operation, with a willingness to make the attempt, my patient and his father consented to take the risk of failure. So the boy was chloroformed at three o'clock P. M. on the 24th of November, 1869; and with the assistance of Drs. C. H. Alexander and A. Given I commenced the operation by making a transverse section of the conjunctiva and fascia about two lines below the transverse meridian, and about the same distance from the inner corneal margin, carrying the incision quite behind the plica semilunaris. Then beginning at the scleral end of the first line of incision, with a delicate pair of scissors I made a curvi-linear section upward, about four lines in extent, corresponding to the corneal border. The flap thus formed was reflected back, and the internal rectus exposed, with a strabismus hook. I carried the muscle forward, and divided close upon the scleral surface the entire

attachment, except a single fasciculus at the inferior border of its tendon. I then seized the divided portion of the tendon, and cut backward from the point of attachment to the sclerotica of the undivided fasciculus, thus removing a triangular piece of the muscle; the base of the triangle corresponding to the scleral end of the tendon, the apex being formed by a termination of the incision at the superior border of the muscle a quarter of an inch distant from the base. The conjunctival flap was replaced and secured with a single silk-thread suture, which completed the operation. My gratification, not to say surprise, may be imagined when the boy awoke and declared that he could "see as well as any body." The cold, wet, compressive bandage was applied, both eyes being closed, and the patient put to bed. On the fifth day after the operation the bandage was removed. The wound had entirely healed, the suture had cut its way out, and nothing save a slight ecchymosis remained to mark the site of the wound. Two days afterward, being the seventh day after the operation, he read diamond type at a distance of ten inches fluently, without glasses, and commenced going to school on the 1st of January, 1870.

[NOTE.—This paper was read before the College of Physicians and Surgeons of this city, in February, 1870, and was intended for publication at that time, but was misplaced. So far as I am aware, the operation above detailed has never been attempted by any one else. I therefore lay claim to it as an entirely original method of manufacturing an inferior oblique muscle out of the internal rectus, as well as an efficient method of relieving double vision resulting from persistent spasm of the superior oblique.

Dr. Loring, of New York, has successfully treated a case similar to the above by division of the superior oblique. Had his case occurred before mine I should not have hesitated to adopt his operation; and I dare say, had my case been

published at the time I first intended to publish it, Dr. L. would have practiced my operation. Happily, however, both of us have succeeded in achieving success by very dissimilar operations, both radically curing a hitherto intractable form of diplopia.]

LOUISVILLE.

A CASE OF CANCER OF THE LIVER.

REPORTED BY H. A. WEST, M.D.,

One of the Resident Physicians of the Louisville City Hospital.

Mike Dowan, an Irish laborer, single, aged sixty-five years, entered the Louisville City Hospital September 2, 1872.

Previous history. Has never suffered from any severe illness, but states that he has never been robust. He has been very poor and much exposed, and has not been capable of doing steady labor since the autumn of 1871. For a year past he has had an uncomfortable sensation in the right hypochondrium. In August, 1872, his failing health compelled him to cease work entirely, at which time he first observed a swelling in the abdomen.

Condition on admission. Considerable emaciation; complexion a dirty yellow; conjunctivæ slightly discolored; skin dry and harsh; pulse 88; temperature in axilla 100°; respiration 28; appetite fair; digestion good; tongue slightly coated; no vomiting; bowels have been somewhat constipated, but are now regular. Patient is not compelled to remain in bed during the day, but when lying down rests more comfortably while upon the back. No special mental depression; complains of difficulty in restraining his urine; passes it at short intervals during the night; urine is high-colored, contains no albumen or sugar; slight jaundice; slight œdema of ankles, but no ascites; superficial abdominal veins somewhat enlarged;

pain, which is of a gnawing character, located a short distance above the umbilicus, is increased upon pressure, but not severe enough to demand opiates.

A well-defined tumor was found situated in the median line about three inches below the ensiform cartilage; evident bulging of the abdominal walls, particularly well marked upon the right side, the lower ribs being pushed upward and outward by the enlarged viscus; intestines compressed in the inferior portion of the abdominal cavity. Upon palpation the liver appears firm and unyielding; the outlines of numerous hard nodules can be distinctly traced. Percussion shows the area of hepatic dullness to be greatly increased. An accurate measurement was not made.

From this group of symptoms the case was readily distinguished as one of cancer of the liver.

The patient was placed upon nutritious diet and a small quantity of alcoholic stimulants; ordered twenty drops of the dilute nitro-muriatic acid three times a day.

October 2d. Ate his evening meal with his accustomed appetite, having walked to the dining-room as usual.

October 3d. At three o'clock A. M. symptoms of collapse set in. Pulse small and frequent; extremities cold; respiration labored; temperature 97½°; colliquative diarrhea. Ordered stimulants at short intervals, sinapisms and bottles of hot water to the extremities. In a short time reaction set in, the pulse became fuller and stronger, the breathing more natural. There was a return of the normal temperature, and the diarrhea was checked by free administration of opium.

October 4th. Symptoms unchanged.

October 5th. Patient became suddenly comatose; breathes heavily; temperature again fell below normal; pulse small and feeble; return of the diarrhea. Death occurred at three o'clock A. M.

Necropsy twelve hours after death. The body livid and emaciated. On reflecting back the abdominal integument

the liver was found greatly enlarged, measuring transversely fifteen inches, longitudinally ten and a half, in thickness five inches, and weighed ten pounds; its entire surface was irregular and studded with grayish-yellow nodules, these varying in size from half an inch to three and a half inches in diameter. Tumors of the same appearance were found imbedded throughout the substance of the viscus; strong adhesions posteriorly and to the right; gall-bladder enlarged and distended with bile; no obstruction of the duct or vein; mesenteric glands indurated; spleen, kidneys, stomach, pancreas, and intestines normal; brain softened, its meninges intensely congested, abundant subarachnoid effusion; both lungs hypostatically congested, the apex of the left adherent to pleura by old and firm adhesions; heart soft, flabby, and pale; otherwise healthy.

Microscopic examination. Liver-cells caudate, fusiform, and spheroidal; oil globules and free nuclei numerous; mesenteric glands contain cells of like shape; but little fat is found.

An interesting point in the history of this case is that, notwithstanding extensive degeneration and disorganization of hepatic substance, there was very slight disturbance of the digestive functions. The appetite was fair almost to the day of death. There was no vomiting or flatulence, no constipation, no diarrhea until the scene had well-nigh closed, and the stools were of normal color. Furthermore the autopsy demonstrated that the cancerous disease existed primarily and alone in the liver. The case illustrates a fact mentioned by Andral, in his *Clinique Medicale*, viz., that many of these cases approach a fatal termination before the gravity of the disease is suspected.

LOUISVILLE.

CONTRIBUTIONS TO THORACIC PATHOLOGY.

BY GEORGE BOUSTLER, M. D.

William McG., aged twenty-eight, entered the army as a private in 1861. During a severe engagement with the Confederate forces he received a wound from a musket-ball, which entered just behind the left clavicle at about the inner point of the insertion of the trapezius muscle, passing downward and across to the right, making its exit near the posterior border or base of the right scapula, midway between the superior and inferior angle of the bone, and about half an inch from the spine. When wounded he was lying on a hillside, and the enemy were firing up from below. A severe rainstorm was prevailing at the time. He was in the hospital one year and nine months, when he was discharged from the service. Up till the winter of 1871 his health was moderately good, being able to support his family by days' labor, and never suffering much inconvenience from the wound. In November, 1871, he was seized with a violent chill resulting from severe exposure; had been sick ten days prior to my first visit. The following was his condition at that time. Upon entering his room the odor was so offensive as to be almost intolerable, and at once led me to suspect gangrene of the lungs. Emaciation was rapidly taking place; pulse feeble and frequent; skin cool and leaking; no appetite; respiration labored and frequent; copious expectoration of a thick, yellow, offensive pus. Physical examination of chest revealed a large cavity in the upper lobe of left lung, and bronchial tubes filled with the purulent secretion. No hopes of his recovery were entertained. Brandy, milk, and beef-tea were freely administered, with an occasional anodyne to relieve pain and cough, the latter being incessant. On the following morning I was very much surprised to find him

better. During the night, in a violent paroxysm of coughing, he expectorated two pieces of bone, the larger weighing twenty-three grains; also a piece of gum blanket the size of a postage-stamp. He wore a gum blanket when he received the wound. He made a rapid recovery, and is now able to perform an ordinary day's labor.

The interesting feature of the case is the presence of these foreign bodies imbedded in the lung structure for such a length of time without producing any serious lesions. The presence of the pieces of bone I can only account for by supposing them to be portions fractured off the scapula by the ball during its course, although there was no evidence of any fracture, as the patient stated, when injured. The piece of blanket was carried with the ball and lodged in the lung.

LANCASTER, OHIO.

HOW TO PRACTICE MEDICINE.*

BY LUNSFORD P. YANDELL, JR., M. D.,

Professor of Materia Medica and Clinical Medicine in the University of Louisville.

GENTLEMEN—This evening forms an important epoch in the history of each one of you. Whatever may be your fortunes in life, none of you can ever forget the incidents of this evening, or cease to recur to them with lively interest. The present is one of the great events of your lives, and affects you all the more because you know that there are hearts far away that are gladdened by the knowledge of what is transpiring in this hall to-night. You have been looking forward long and anxiously to this hour when, your pupilage ended, you should step into the ranks of your profession. Pupils no longer, we now take you by the hand as younger brothers.

*A Valedictory Address: delivered to the graduates, March 3, 1873.

You have been pronounced competent to take charge of the health of your fellow-beings, and a diploma certifying the fact has been with all due ceremony placed in your hands. By the parchment you hold you have been formally admitted into one of the professions which the world has agreed to call learned. You are doctors of medicine by authority of the Commonwealth of Kentucky and of the University of Louisville, an institution which has a name among the medical schools of our country, which numbers among those who have taught within its walls physicians and surgeons of renown, and among its graduates names that have become famous in the profession.

I need not admonish you that in coming into the profession of medicine you have assumed high responsibilities, and that grave duties will rest upon you. Whatever of reputation you may hope to achieve among men you expect to win in the line of medicine, and the good you look forward to accomplishing is to be done through the profession to which you now publicly dedicate yourselves.

Not as legislators or politicians, not as men of letters or as scientists, do you expect to rise to distinction and secure the regard of men, but as earnest, hard-working physicians. In rising to bid you God-speed as you are about to quit your *Alma Mater* and go forth into the world, you have the right to expect of me, as the organ of the faculty, some parting words touching the life which you are about entering. I have thought that in conforming to this time-honored usage I could not spend the moments that remain to us here this evening more profitably than in submitting to you some thoughts *on the Way to Practice Medicine.*

It may be that I should interest you more by giving you some directions *how to get practice.* This indeed is a very grave question, which I fear will cost many of you very anxious thoughts for many a day to come. If it is not already the uppermost thought in your minds, it will doubtless soon

become so, and gladly would I answer the question if I could. To get into business—to become independent—this is beyond all controversy a most desirable consummation. But this sort of success depends upon so many accidents of mind and person; so much upon family connections and religious influence; upon where you fix your homes; upon your tact, manners, address, and numberless other circumstances, that I hardly know how I should go about pointing out any sure road to it. I utter but a truism when I tell you that the surest—at least the best—way to succeed is to deserve success; that merit, like truth, is apt to triumph in the end; that knowledge and skill in the art you profess are almost certain to win in the long run. But in medicine, much more than in the other learned professions, success is a thing of accident. An eloquent young preacher never has long to wait for a "call." A gifted young lawyer never lacks opportunity to assert his claims to position and business; every body can have proofs of his ability. But the young physician has no open theater upon which he may appear and show what is in him. He is not permitted to volunteer his services. Our Code of Ethics would stop that very soon. He must wait, as the young ladies have to do, to be asked. No matter how great his attainments, no matter how splendid his talents, he must first establish his claims to professional skill. Medical biography teaches that for this reason the ablest men have often had to wait long for practice, while shallow men have got business at once. This reflection should be a great consolation to those of you who may thrive slowly, and I am sure it will not humiliate those of you who may succeed rapidly. Men of every turn, appearance, and character have attained temporary distinction in medicine—the most illiterate as well as the most learned; the weakest and the wisest; men of polished address and men of the rudest manners; the eccentric, the capricious, the irregular, as well as the sedate, the dignified, and the moral.

The popular mind has a scale for graduating the preacher and the lawyer at once, but it has none by which to take the proportions of the doctor. Besides, a popular mind that can be imposed upon by mesmerism and spiritualism; that can credit the stories told of female mediums reading from the pits of their stomachs, or with their finger-tips; that puts faith in planchette; that believes in the possibility of men and tables being suspended in midair by an "*odylic force*," can accept any thing concerning medicine. No humbug about the cure of diseases was ever yet announced so monstrous that it had not its dupes. No charlatan who promises wonderful cures will ever fail to secure believers. So I shall not attempt to point out to you any sure path to business; only reminding you that the great law of nature, "the selection of the fittest," prevails equally in the moral and in the physical world. To mortal eyes this law seems not to be invariable in either; but you may safely believe that if you sow good seed now, while you are young, it will spring up in time to "blossom in your manhood, and yield you fruit when you are old."

This other question on which I wish to say a few words may seem to you at this time a rather unimportant one, since you have read so much and heard so much for years past about disease and its treatment that you naturally feel a good deal of confidence in your preparation to enter the lists with it. You have a very strong conviction of the efficacy of medicines, and of your competency to use them with good effect. This is all well; but I must tell you, as the result of some trials and much observation, that this confidence is likely to be a good deal shaken in the earlier years of your experience; and then you will not contemn any hints that you can find as to the best way to practice physic.

One of the first lessons you will learn at the bedside of the sick is that disease, as seen by you, is not exactly the thing you have had described to you in books and lectures.

I mean that you will often find it difficult from the description of it to make out the disease. Instead of the distinct, palpable entity you have been hearing and reading about, it will put on many times a most ambiguous shape, and appear to you rather a complication of disorders; for so close is the relation of the various parts of our organism that when one suffers all are apt to complain; and you must be uncertain in many cases whether the malady has its origin in the blood or in the nervous system, in one or another of the great organs—the liver, the lungs, the stomach, or the kidneys.

In practice then the first thing you have to determine is, what is the disease with which the patient is afflicted. This is diagnosis; and skill in diagnosis is properly reckoned one of the highest of all the accomplishments of a medical man. To perceive correctly, to distinguish readily between appearances, to decide upon the relations of signs and symptoms to one another, and judge of the significance of all, is a quality of mind enjoyed by different men in very different degrees; but it is one which may be greatly heightened and improved by practice. There are those who seem gifted with the faculty of seeing at once into the nature of a complaint. They look at the countenance and the tongue and feel the pulse, and all is apparently revealed to their understandings; but I would caution you against the belief that you are possessed of such powers of intuition. It is by a careful examination that most of us may hope to arrive at a true conception of the case. Even in external affections, where most depends upon the eye, care and much study are necessary to prevent mistakes. Small-pox is a disease generally pretty easily recognized; but practitioners every now and then confound it with measles, chicken-pox, lichen, and other affections; and the eruption caused by croton-oil has been mistaken for it. It is by the method of exclusion that we reach the true nature of a disease. Beginning with one organ and proceeding to another, there are phenomena connected with each, the presence or absence

of which will determine whether it is involved. By investigating the state of the senses and of the intellectual faculties, by physical exploration, by chemical tests applied to the secretions, by the thermometer and other instruments, it is that you must arrive at the diagnosis; and in instances too many you will have need to bring all these methods into requisition after you have got all the light you can from the history of the case, in order to determine its nature. Allow me then to urge upon you the study of diagnosis.

One of the first qnestions often that will be asked you is, "Doctor, what ails the patient?" and you will suffer in the minds of his friends if you are not able to answer it. Fortunately, however, the laity are for the most part easily satisfied, and a Greek or Latin word will generally content them. This is one of the advantages, by the way, of a doctor's knowing the dead languages.

The disease once recognized, the next question is, What is to be done for it? The error on this point into which you are most likely to fall is that of doing too much. You will be expected to do something in every case to which you are called. In many families you can hardly avoid giving medicine, no matter how trifling the ailment may be. The sick and their friends will distrust your skill unless you give them physic. They will conclude either that you underestimate the gravity of the disease or do not understand it. Great is the faith of men in the remedial power of drugs, and it will be neither wise nor kind in you to attempt to shake it.

It was the custom in a former age, as you know, to write every thing relating to medicine in a learned language; and some one remarked, while that fashion prevailed, that it is the duty of physicians to relieve their patients *cito, tuto, et jucunde.* No better rule of practice assuredly was ever laid down in any language. The most exacting patient could hardly ask more of his medical attendant than to cure him quickly, safely, and pleasantly. But here you at once meet

a difficulty. One of the most important truths that you have learned from your teachers and from modern medical literature is that many diseases are self-limited in their nature, and run a determined course despite all human power; and that attempts to abort them only diminish the chances of a favorable termination. When it was held, for example, that small-pox, measles, scarlatina, typhus and typhoid fevers, and certain other maladies could be eliminated from the system and cut short by medicine, incalculable torture and innumerable deaths resulted from the practice based upon this now exploded theory. No longer do we attempt to cut short the self-limited diseases, but content ourselves with sustaining our patients with food and stimulants, as may be necessary, now and then treating symptoms and conditions which seem to demand our aid, and trusting to strength of constitution in the invalid to outlive the disorder. Not only in these specific affections, but in acute diseases generally, the tendency of practitioners has been to excessive medication. Regarding disease as something foreign to the system, which could be driven out by medicine—as an entity, an enemy, which it was the physician's business to dislodge—harsh, exhausting remedies were given that proved oftentimes, it is to be feared, allies of the disorder rather than of the sufferer. In addition to the vast and oft-repeated doses of violent and disgusting drugs, patients were bled and starved and denied cooling drinks, and were fed on warm slops, and kept in heated rooms under piles of bedclothes to expel the imaginary poison. When they died the death was charged to disease; when they got well the doctors credited themselves with the cure.

You will have no excuse to follow your ancestors in medicine in these evil ways. You have been taught that there is a restorative principle in living bodies that tends to relieve them of disease, and that time is one of the most essential elements of cure. "Time and I," any one of you

may boast, with the Persian sage, "against any other two." Disease implies want and not excess; and the office of the physician is to correct the disordered action or quiet it, and supply what is deficient. In this view of disease, now generally held, consists in a great degree the superiority of the medicine of this day over that of the age just gone by. Consumption we now often cure by improving nutrition. Epilepsy, once deemed well-nigh incurable, you find a comparatively tractable disease, and curable in the majority of cases. Malarial affections, once a terrible scourge, in our day seldom prove fatal under this improved system of medication.

But if you can not in every instance attempt a speedy cure of your patients, it is your duty always to conduct the treatment upon principles of safety. Said the great Sydenham, "Your first duty is to do no harm." The first quality of a prescription is safety. That "desperate diseases demand desperate remedies" is a baleful proverb. If there be a chance for a remedy to do harm, do not give it; and if there be a doubt as to the necessity of a dose of physic, give the sick man the benefit of the doubt and not the dose.

And now we come to the third condition of the Latin precept. It is your duty to cure your patients as pleasantly as possible. This has been too little considered by the profession. I am not sure that it would not be well to incorporate in our Code of Ethics that every doctor should taste all the medicines he prescribes, in order that he may know the abominableness of some of his prescriptions. Whatever our forefathers may have attempted in the *cito* and the *tuto* line, they certainly gave very little thought to the *jucunde* principle in their practice. In truth, I think the idea of *penance* must have entered into their theories of therapeutics; or else, it may be, they deemed it philanthropic to render their patients so wretched on earth that, if they got to a worse place, they might be better prepared to endure its tortures, and be fitted

to enjoy more exquisitely the pleasures of health if they got well. When such a mode of practice as this was in vogue we can not wonder that men, in their extremity, sometimes called out to the faculty in the words of Crabbe:

> "Hold thy hand, health's dear maintainer,
> Life perchance may burn the stronger;
> Having something to sustain her,
> She, untouched, may last the longer.
> When the artist goes about
> To redress the flame, I doubt
> Oftentimes he snuffs it out."

You practice it to be the reverse of this in every particular. Chemistry and pharmacy have put a new face upon the materia medica, and you will encounter disease with remedies so gentle, so tasteless, so palatable, so free from all perturbing qualities, that your patients should consider it a pleasure to take your medicine. But I am afraid they will not; for sick people are proverbially unreasonable, and seldom enjoy any thing, especially physic; however, you will have the satisfaction of knowing that you have done your duty.

In all things study the quiet, the ease, the enjoyment of your patients. Give them abundant fresh air and ice and cold water and fruit, when they desire such things. As to food, obey their appetites. Hunger and thirst have been well styled our "physical conscience," which in the sick-room is never to be disregarded. They are safer guides in respect to diet and drink than can be found in all our medical philosophy. They make known to us what the living organism needs. Whatever sick people have a true desire for they ought therefore to be indulged in. When your little patients have been sick a long time, and have become anæmic and emaciated, it may be for want of proper food, have them carried to the table, and allow them to indicate by signs, if they have no words, what their systems require to build them up again. Infants suffer great distress when ill on account of thirst, which they have no way of making known to us

except by their moans and cries. You will often be delighted to see how instantly their plaints cease on your giving the little sufferers a drink of cold water. Dismiss from your minds then and every where discountenance the absurd notion that cold drinks can ever be injurious to the sick. Avoid noise in the sick-room. Whispering too should be discountenanced. The attention of patients is attracted by it, and they are annoyed and fatigued by the effort to hear. Some of my colleagues whisper that this is especially the case with lady-patients.

As a general rule, you may safely trust the feelings of convalescents in regard to sitting up and taking exercise, as well as in reference to diet. In a word, you can scarcely consult the inclinations of the sick too far, except as to physic, of which of course they know nothing. But I must put you on your guard against yielding to the advice of their nurses and friends. Consult with no one but a doctor, and never take a suggestion from a non-professional person. You will encounter numberless sage individuals every where ready to aid you by their counsel, based upon long experience or something they have heard. If you adopt their suggestions, the patient and attendants will soon and naturally conclude that they know as much about physic as you do. It will be well therefore respectfully but firmly to put aside all such interference.

Besides this scrupulous attention to the physical well-being of the sick, you must remember in every case the powerful influence of the mind upon the body, and should seek always to bring its restorative power to the aid of your patients. Cheerfulness does good like a medicine. Hope is one of the most efficient of tonics. Men when under strong emotion will accomplish feats utterly beyond their power in moments of coolness. A story is told of a paralytic who had not walked for years, but recovered the use of his legs in an instant on being thrown down from the shoulders of a terrified friend

in the presence of what both took for a ghost. It is related of the first Napoleon that crossing the Alps, in his second invasion of Italy, by an untried route, he often came to passes in the mountain over which it seemed impossible to urge his heavy artillery. Generally, when the soldiers paused, it was sufficient for their commander to appear before them. A look or a word from him inspired them with new courage and strength, and the train moved forward. But if the obstacle seemed insurmountable, and the column stood still, he commanded the drums to beat and the bugles to sound, as if for a charge, and this, says the historian, never failed. A physician who by his manner inspires his patients with hope and confidence will often do more by his presence alone than one of a timid, hesitating manner may do with all his drugs. And there is another potent influence often invoked in behalf of the sick, though but seldom written or spoken of in our lectures or medical books. *This power is the prayers of good people.*

"More things are wrought by prayer than this world dreams of,"

wisely says the world's greatest living poet. True, many if not most men scoff at prayer when in health and in safety, but sickness and danger are apt to give them faith enough at least to try it. "The handwriting of the Divinity in the soul, though seemingly obliterated, has come out with awful distinctness in the solemn seasons of life," says a great preacher.

In most of the cases to which you will be called the tendency is to health. Time would insure recovery without your assistance. These are the cases in which homœopathy has its strength. In these you can give a favorable prognosis with perfect assurance, and the confidence with which you inspire your patients will be a great auxiliary to your medicines.

The practice of medicine in our day is by no means limited to therapeutics, but embraces also the prevention of disease;

which will probably come to be regarded hereafter as the most important branch of the healing art. Your knowledge of the laws of health will put it in your power to stop a vast amount of human suffering at the fountain-head. You may instruct parents and teachers how children can be raised with strong bodies while their minds are being cultivated and strengthened; how they may be made comely in form and feature at the same time that they are becoming scholars; how their tempers may be softened and their lives made happier by wise physical training; and how scrofula and consumption and other maladies that may be lurking in their young systems can be forestalled.

In pursuing the practice of medicine you are never to forget that you belong to a brotherhood the interests of which you are under obligations to consider in all of your acts. It is your duty to study the peace, the dignity, and the advancement of your profession. You will hardly have been long in practice before you will encounter cases that prove an overmatch for all your science and skill — obscure cases, about which you will be in painful doubt. In such circumstances you owe it not more to your patients and your profession than to yourselves to propose that another physician be called in. I have heard of an old professor who was in the habit of advising his pupils to avoid consultations as long as possible, or at least until the disease had reached its crisis; for the reason that if the change was favorable further counsel would be unnecessary, and they would get all the credit of the cure; and if unfavorable, then the consulting physician would come in for a share of the blame. Your teachers would countenance no such selfish policy. Your patients are entitled to your best efforts, and the moment you begin to have doubts as to your course you ought to suggest a consultation. And when you are called to a case where another physician is in attendance, be conscientious about suggesting changes in the treatment. If a change appear to you important, it

must be proposed. The safety of the patient is always the paramount consideration. But needless changes ought not to be made. They operate to the injury of the attending physician. The apprehension of such unfairness deters many young physicians from seeking consultations when they would otherwise be desirable.

Among the aborigines of our country, we are told, there was a superstition long current, and it may be is prevalent still, that all the virtues of a warrior slain inured to the brave who might have the good fortune to kill him in battle or by stratagem. As many heroes as he killed so many times was he a hero. This superstition, I sometimes think, is far from being peculiar to our Indian predecessors. It has a deep root, if I am not mistaken, in the minds of the Caucasian race of men, and particularly in the medical branch of that great family. I think I may say with truth that I have seen doctors go about mangling the reputation of one another with as "stern a joy" as ever red savage felt in scalping and tomahawking a fallen adversary. They have seemed to fancy that if they could only succeed in dragging an angel down from the skies they would be sure of a place themselves up there. It may be, gentlemen, that, from education or association, you are somewhat tinctured with this superstition. If so, I pray you to dismiss it at once from your minds. You could not cherish a wilder delusion.

In the first place, you seldom do a man, and especially a professional rival, much harm by defaming him; and in the next place, the better you succeed in shaking the confidence of men in your brethren the more effectually you will impair their falth in your profession. The more doctors you can show to be humbugs the nearer you will be to convincing society that medicine is a humbug. That there are charlatans, impostors, and ignorant pretenders in our ranks is but too true. Always there have been such, and the tribe is as full of vitality to-day as ever it was; "age has not withered it

nor custom staled its infinite variety." But let them "severely alone." If the people will employ them, so much the worse for the people, and we can not help it. When the world in general comes to know as much about medicine as we doctors do, then the quacks will starve. For this reason I believe it would be well for all the newspapers and magazines to have a medical editor attached to their staffs, which I have no doubt will some day be the case. Concerning no important science or art is the public so densely ignorant as it is about medicine, and yet no earthly subject is of more vital importance to the public.

In the course of these remarks I have already alluded to our Code of Ethics. You should possess yourselves of the little book containing the code at once, and if you would continue in good standing in your profession you must observe implicitly its laws. It is not a perfect code; and in this age of change, when state and national constitutions are being altered and theological systems are being modified, it is not unlikely that the code may be revised and made better. This suggestion will fill some of our older brethren with vast horror and indignation; but I believe the revision will be made, sooner or later, nevertheless. So long, however, as the code stands as it is you are bound to adhere to its requirements, and will be outlawed by your brethren if you should transgress the rules therein laid down.

But I am detaining you too long. You are anxious, I know, to turn your faces homeward, and I must close.

Gentlemen graduates, in the name of your teachers, I express to you, in parting, the fervent wish that good may be with you all; that "length of days may be in your right hand, and in your left hand riches and honor." Our prayer is that, as you go forth to heal the sick and minister to the suffering, you may find in every trial of your lives, and down to life's close, the peace, the consolation, the strength of those who put their trust in the Great Physician. Farewell!

Reviews.

An Essay on the Climate and Fevers of the South-western, Southern Atlantic, and Gulf States. By Jas. C. Harris, M. D., of Wetumpka, Alabama. Charleston, S. C.: Walker, Evans & Cogswell. 1872.

The subject of this admirable dissertation possessed at one time an absorbing interest, and, although the nature and effects of the poison which operates widely still do not now excite so much attention as formerly, we are sure Dr. Harris will receive the thanks of the profession for his effort to throw light upon the question. His essay is the production at once of a scholar and a practical physician, carefully, candidly written, and full of facts in which all physicians are concerned.

What malaria—the bad air, the marsh miasm, to which we attribute our autumnal fevers—is remains, after all the inquiry to which it has given rise, as much a matter of conjecture as when Lancisi put forth his speculations concerning it. It is still an unknown agent, perceptible by no sense, discoverable by no test yet known to chemistry. We see fevers of a peculiar type prevailing in certain regions of the earth, originating under certain conditions of heat and moisture in conjunction with vegetable matter, and yielding with remarkable uniformity to a specific remedy, and we call them malarial fevers. We infer that a specific poison has been at work producing them because they are *sui generis;* and although it has never been exhibited in a tangible form, few are found to doubt its existence.

The fact most interesting to us of all relating to this morbific agent is that it is disappearing from the earth, or at

least has ceased to afflict wide districts of country over which it once held a most baleful sway. Fifty years ago hardly any disease was more dreaded in the valley of the Mississippi than remittent fever, which recurred annually with all the regularity of the seasons. It was one of the most widespread of our endemics, and the mortality from it, one year with another, exceeded that of any other disease. In all the early settlements it was sure to break out as soon as the forests were cleared away and the sun was let in upon the reeking soil; and for many years after the older frontier states had advanced far in agricultural and social improvement it continued to be the peculiar scourge of the country. Whole neighborhoods along streams and near lakes and marshes were prostrated every summer and autumn by the fever. The miasm appears to have reached its acme in the summer of 1822 or 1823, at which time it prevailed with a malignity unknown before or since that period. Dr. Harris notices the fact that about that time it swept over Alabama with marked severity, in many places assuming the fatal type of yellow fever. During the summers just referred to it was epidemic in Louisville. It was so general that there were not enough people in health to wait upon the sick, and much suffering resulted from the scarcity of nurses in the town.

How all is now changed in respect to this fever we need not point out to our readers. It is obvious to every observer. We have remittent fever as a prevalent disease outside of the Gulf States no longer. Now and then a case may be seen, but it is rare to meet with one in the valley of the Ohio. To be sure, there are physicians who hold that the apparent change is due to medical treatment; that we abort the fever by quinine, or convert it into an intermittent; and that under the old plan of treatment we should have as many cases of the remittent type as ever. We are persuaded that this is a mistake, and that the malaria which develops remittent fever has nearly ceased to operate in wide latitudes where it was

once active. But while this is true of the remittent form of miasmatic fevers, it does not hold in regard to intermittents, which still maintain their ground. It can hardly be said that intermittent fever is less prevalent in late years than it was when its kindred fever raged with greatest malignity. And this must be regarded as a singular fact; for we have been in the habit of looking upon intermittent and remittent fever as mere modifications of the same morbid condition—intermittents now and then running into remittents, and remittents being convertible into intermittents by proper treatment. The subsidence of remittent fever while intermittents continue to prevail as widely as ever would seem to show that the diseases depend upon different causes.

Dr. Harris, in his essay, has furnished a valuable contribution to our literature on this subject. He shows himself to be a close and patient observer and a correct and logical thinker, who has made good use of all the researches of others in the same field. He has embodied in his little work a fund of information relating to climate and topography, which will be of the greatest value to those who may wish to follow him in this line of inquiry. His sketches of the country are clear and interesting. He is a firm believer in malaria as something different from spores or animalcules, and his arguments in support of his view strike us as conclusive. In reference to quinine, he believes, with Dr. Baldwin, that it may be pushed so far as to produce injurious effects; and his practice is to give not more than thirty or forty grains a day, especially in cases of a congestive type. He insists upon the importance of restoring the secretions, which are always suppressed or disordered in the disease; and for this purpose he gives eight or ten grains of calomel in combination with a quarter of a grain of acetate of morphia, which he repeats in four hours, "according to the amount of hepatic derangement present, until two or three portions are given."

Appended to his topographical sketches of our south-

western states Dr. Harris has given a map and a meteorological account of the Dead Sea region, compiled from the report of Lieut. Lynch, which adds very much to the interest of his work. We hope a new edition of the essay will soon be called for, and that the experienced author will go into fuller details respecting his treatment of fevers. His essay is gracefully dedicated to his distinguished countryman, Dr. Wm. O. Baldwin, who is every way worthy of the honor.

L. P. Y.

The Diseases of the Stomach. By Wilson Fox, M. D., F. R. C. P., F. R. S., Physician Extraordinary to Her Majesty the Queen, etc. London and New York: McMillan & Company. 1872.

A Manual of Chemical Physiology, including its Points of Contact with Pathology. By J. L. W. Thudicum, M. D. New York: William Wood & Co. 1872.

It is about fifty years since Sir Wilson Philip wrote his elaborate treatise on Indigestion, which for a good while was the highest authority on the subject. Not quite half a century before, the illustrious William Hunter was in the habit of saying in his scholarly lectures, "Some physiologists will have it that the stomach is a mill; others, that it is a fermenting-vat; others again, that it is a stew-pan; but in my view of the matter it is neither a mill, a fermenting-vat, nor a stew-pan, but a stomach, gentlemen, a stomach." In looking somewhat carefully through the numerous references of Dr. Fox to the authors who have treated of dyspepsia we have not found any notice of Sir Wilson Philip's work; and as to the doctrine of Hunter in regard to the independence of the stomach of all laws except those of vitality, we may safely say that it is universally repudiated. Every page of the works before us affords evidence of the changes which have taken place in physiology and the practice of medicine in the last

century; and they also afford melancholy proof of the brevity of life among medical authors. "Are we forgotten so soon?" most of them would exclaim, with Rip Van Winkle, could they revisit the scene of their earthly labors. The books we studied when pupils in medicine have long since been laid aside, and their successors in turn have been superseded by others representing more faithfully the medicine of our times.

Dr. Fox has put forth a volume of uncommon excellence, which we feel very sure will take a high rank among the works that treat of the stomach. After a clear account of the symptomatology of this viscus, he takes up the special diseases to which it is subject—to wit, atonic dyspepsia, neuroses, acute catarrh, chronic catarrh, ulcer, cancer, hemorrhage, hypertrophy, stricture of the cardiac orifice, dilatation of the stomach, obstruction of the pylorus, softening, rupture, perforation, and tubercle. While some gastric complaints are among the most frequent of all our bodily ailments, fortunately some of those just enumerated are rarely encountered in practice. Few indeed are the individuals so happy as to go through life without some annoyance from indigestion. Cancer, tubercle, perforation, and rupture of the stomach are calamities with which few comparatively are afflicted.

Atonic dyspepsia is an exceedingly common complaint, resulting as it does from any of the thousand causes that impair the general vigor of the body. Always chronic, it is, as a general rule, unattended by fever, and makes itself known by weight, uneasiness, and languor after a meal. As dyspepsia is merely a symptom of disorder of the stomach, so this form of the affection indicates a want of vital power in the general system; and the treatment must have reference to this condition of things. It is chiefly regimenal and dietetic. Medicine may aid, and Dr. Fox mentions strychnia, the mineral acids, mineral waters, and ipecacuanha in half-grain doses before meals, as having proved beneficial; but it

is to obviating costiveness, regulating the diet, and taking exercise that the patient must look for securing good digestion. His physician may suggest a bill of fare, but in the matter of diet the dyspeptic must at last learn to minister to himself. No rule, except the rule of eating what is found digestible, can be laid down as even generally applicable. If leading a laborious life, he must rest for a short period after eating; and if a student, he must not tax his mind severely during the first stage of digestion. Whatever has induced the general debility should be corrected. As supplementing the natural solvent of the stomach, pepsin is much recommended in atonic dyspepsia.

Very closely allied to the foregoing variety of dyspepsia is that condition of the stomach to which the terms morbid sensibility and gastralgia have been applied, and which Dr. Fox describes under the name of neuroses of the stomach. As the latter phrase implies, this is an affection connected with disorder of the nerves. It is more common in early life than in old age, and in females than in men. Hysteria and hypochondriasis are among its phenomena. The treatment is tonic and stimulant. "The discovery and cure of any source of peripheric irritation from which the symptoms may originate is of the very first importance." They often have their start in uterine disorders, as all physicians of experience must have remarked, and disappear when the primary disease is relieved. Nux vomica, bismuth, the nitrate and oxide of silver, and opium are the remedies chiefly relied on by Dr. Fox in this affection. The sulphate and oxide of zinc have also been found useful in the irritable state of the system resulting from anxiety and exhaustion. In some cases attended by obstinate vomiting relief is afforded by rest to the stomach, only a spoonful of milk being given to the patient at a time, and repeated at short intervals.

Acute gastric catarrh is an exceedingly common affection, and gives rise to a majority of the acute attacks of indigestion.

It may be attended with pain at the epigastrium, vomiting, thirst, and febrile reaction; or it may only be revealed by general malaise, constipation, and headache. In nearly all cases there is want of appetite, so that the patient is not likely to commit errors in the way of diet; but the food taken should be mild and unirritating. Purgatives have the best effect in the milder cases. Beaumont relieved his patient, St. Martin, of headache, furred tongue, and sallowness of skin, restoring his appetite, by "full doses of calomel and aloes." There is no question that the pill so extensively used in all our southern and southwestern states, composed of calomel, aloes, and rhubarb, is one of the best remedies in this form of dyspepsia. The other remedies spoken of by Dr. Fox are bismuth, effervescent drinks, ipecac, saline laxatives, and hydrocyanic acid, as symptoms may demand. Mineral waters possessed of laxative virtues exert the happiest effect, and as habitual aperients may be regarded as the best.

Chronic catarrh of the stomach embraces a large number of the cases of obstinate chronic dyspepsia, the worst of which have their rise in ulcers or cancer. These last are recognized by the greater severity of the symptoms attending them. Among the occasional causes of this form of dyspepsia, though by no means a common one, Dr. Fox properly mentions the abuse of stimulant, tonic, and purgative medicines. The treatment must vary with the cause of the disease. In cases succeeding an acute attack the sedative is the most salutary plan; and of all single remedies our author considers bismuth the most efficacious, combined with magnesia, or where there is much nervous irritability of the stomach, with morphia and hydrocyanic acid. Arsenic has been recommended by some authors, and the mineral acids are often useful given with meals, and in combination with pepsin. Purgatives Dr. Fox would give with caution; but he has found in cases induced by excess in eating no plan more serviceable than free purgation with mercurials. Mercurial purgatives, he adds, are also

of use in cases of congestion of the stomach arising from disorder of the liver. "Cases occasionally occur where a severe and long-continued inflammatory condition of the stomach, which has resisted all other remedies, and also a careful dietetic regimen, yields promptly to a mild mercurial course sufficient to touch the gums." Habitual constipation may be overcome by pills having aloes as a constituent, and is a condition never to be lost sight of in the treatment of dyspepsia.

For want of space we are compelled to omit any notice of the other subjects treated of in this admirable work; and in what we have written we have not been able, for the same reason, to give the author's remarks on the etiology, symptoms, and diagnosis of the various forms of dyspepsia, which to the student will prove the most interesting and useful part of his treatise.

Dr. Thudicum's work embraces an account of physiological or animal chemistry as now extant, and an analytical guide for students engaged in that study. It is necessarily concise, but will be found to be a complete synopsis of the facts pertaining to the science of which it treats. The author makes it very clear that animal chemistry is still in an immature condition. Theories in reference to morbid states of the body, based upon chemistry, have proved for the most part to be utterly baseless. The glycogenic function of the liver, one of the most noted of them, is still *sub lite*. And "on the whole," remarks Dr. Thudicum, "there is at present neither a plausible theory nor a rational treatment of diabetes; as evidenced by the fact that noted physicians now maintain that diabetic patients eating promiscuously every thing are better off than patients who abstain from starch and confine themselves to the anamalyc diet so elaborately prescribed by Bouchardat."

Of pepsin he says it is not destroyed during digestion, but transforms great quantities of solids into a fluid state

by what is termed "contact action." The quantity of gastric juice secreted daily in the human stomach has been estimated at from sixteen to thirty pounds. The secretion of the hydrochloric acid from the stomach glands, so far from vital, is regarded as a "chemolytic process," by which salts of alkalies are split up into acid and base. The stomach itself is believed to be protected against the corrosive action of its own secretions by a chemical process; the hydroxide of sodium keeping the blood and tissues alkaline, and thus neutralizing the acid by which the coats of the stomach would be dissolved. The hydroxide of sodium soon becomes carbonate of soda in the blood, and enters into bile in the liver. Bile precipitates pepsin; and when it is regurgitated into the stomach at once arrests digestion, and therefore puts an end to pepsin digestion in the duodenum, and favors the alkaline digestion of the pancreas. Chyle is a composite fluid, containing much fat, to which it owes its milky appearance, with fibrine, potassium-albumen, the ordinary albumen of serum, lactates, sugar, and a certain amount of alkaline salts — the materials, in a word, by which the blood is constantly renewed. Hematocrystalline is the most important of all the constituents of the blood, and its optical and chemical phenomena afford the most certain diagnosis of that fluid where its character is questioned in medico-legal cases. A diminution of this element constitutes the morbid condition known as chlorosis or anæmia.

The blood-corpuscles are carriers of oxygen, but not of carbonic acid, which is held in solution by the serum. The excretion of this gas from the lungs "is an act of specific secretion," in the opinion of Dr. Thudicum; and so is "the act of first breathing," though he fails to make the proposition clear. We confess we are not able to see in what respect the transpiration of carbonic-acid gas bears any resemblance to secretion, much less the first act of breathing in the new-born child. In cholera, he thinks he has shown, the serum refuses to perform its function, and the corpuscles, exhausted

of water, cease to carry oxygen; oxidation of waste tissue fails as a consequence, and the temperature necessarily falls. Hence the algid condition in that disease. The breath, ordinarily consisting of water and carbonic acid, with oxygen and nitrogen, may contain carbureted hydrogen in diseases, as well as ammonia. "These investigations have only just become possible by the invention of an apparatus which admits entire persons to be observed for days in glass chambers, and their excretions to be accurately analyzed and determined. By means of this method it has now been found that man during sleep stores up a quantity of oxygen in his body, particularly his muscles, which is therefore ready for the production of force the moment it may be wanted." These facts are exceedingly interesting, but we have doubts whether the method by which they are reached would be entirely satisfactory to the subjects of the experiments. To be shut up in a close glass house for days, it occurs to us, would be any thing but agreeable, even for the laudable purpose of enabling scientific observers to determine the exact nature of one's excretions.

The supposition that bile is secreted in greater quantities under the operation of mercurials, Dr. Thudicum pronounces "an exploded fallacy," bile not decomposed having never been found in the fæces; and yet he states that the anomalies of fæces are quite unknown. Bile may be decomposed by that process of chemolysis which takes so important a place in the functions of the intestines. Anyhow, the fact remains that mercury exerts the happiest effect in disorders supposed to be connected with the liver, whether by increasing the secretion of bile or by some other unexplained action.

But we can not continue any further our notice of this interesting little volume, only adding that it is one of the most instructive that has appeared on the subject of animal chemistry. L. P. Y.

Clinic of the Month.

Chronic Ulcer of the Stomach.—In the work of Dr. Wilson Fox, a review of which will be found in another part of this journal, the following admirable summary of the treatment of chronic ulcer of the stomach occurs:

"1. Rest; 2. The cure of conditions of the stomach which cause undue acidity from fermentation or hypersecretion; 3. The relief of pain; 4. The relief of vomiting; 5. The arrest of hemorrhage; 6. The relief of constipation; 7. The treatment of perforation. The measures indicated under the first two divisions are in great part regimenal and dietetic. Medicinal remedies also aid these, and are applicable to most of those subsequently named.

"1. It has been seen that many of the most urgent symptoms result from the movements of the stomach in the act of digestion; and our first indication is to reduce these as far as possible to a minimum amount, and to maintain the strength of the patient by the smallest quantity of the most digestible food necessary for this purpose, and especially to avoid distension of the stomach by any single large meal. The same principle should be kept in mind by endeavoring to reduce as far as possible all waste of tissue by bodily exertion; and for this purpose complete rest should be enjoined, and the warmth of the body should be fully maintained by external clothing. Confinement to bed during all the severer exacerbations is almost indispensable. Cruveilhier's method of restricting the patient to a milk diet has been justified by the success which usually attends this plan. The milk should be given in small quantities, rarely exceeding a tea-cupful, at

intervals of two hours; and in severer cases, or when vomiting is frequent, the amount must be restricted to table, dessert, or even tea-spoonfuls. Long fasting is highly undesirable, and it is therefore better that the patient should be occasionally awakened in the night than that many hours should elapse without taking nourishment. The milk is often better borne when mixed with well-boiled arrow-root or biscuit-powder, since its coagulation into masses in the stomach is thereby prevented. It should not be taken too hot; but there are great differences in individual patients with respect to the temperature at which their food can be taken. Some German authorities recommend buttermilk as a substitute, when milk in its ordinary form appears to disagree; or under these circumstances it may be diluted with water, lime-water, Carrara-water, or soda-water. The last combination is often the most agreeable to the patient. This method may often be continued for many days, or even a fortnight or three weeks, with great benefit; though at the end of this period the patients often acquire a great disrelish and even aversion to the milk diet, and some change may become necessary. It must, however, be borne in mind that occasionally an idiosyncrasy appears to exist against milk, which is not digested, but gives rise to flatulence, acidity, increased pain, and even to vomiting. In the case also of elderly people milk sometimes fails to nourish, and unless a different diet be adopted the emaciation and loss of strength of the patient will increase. Under such circumstances recourse must be had to animal broths, made strong, but given cool, and in similarly small quantities at each meal. If pain be severe, or vomiting urgent, I have found great benefit result from the adoption of the method proposed by Dr. Balthazar Foster, of withholding all nutriment by the mouth, and administering food entirely by enemata of strong beef-tea or milk, with which brandy may be combined or not, in doses proportioned to the strength of the patient. Opium may also be given in these enemata, and it

not only enables the rectum to retain them longer, but also alleviates the other symptoms. As the state of the patient improves, and the more urgent symptoms subside, more latitude may be permitted; but great caution should be exercised in this respect, even during periods extending over some years. Indigestible food of all kinds must be strictly forbidden, and great care must be continuously exercised to avoid undue distension of the stomach with any single meal, and the more so as the excessive appetite may often tempt the patient unduly to indulge in this respect. Hence, with the precaution that each meal should be small, food should be given at intervals of three or four hours, and milk may with advantage form a considerable proportion of the diet. Lightly-boiled eggs, when these agree, and the more digestible meats, which at first should be well stewed, may be cautiously indulged in. Bread should be eaten stale or toasted; but the use of vegetables should at first be restricted to potatoes in small quantities, and these are often replaced with advantage by macaroni. The importance of a perfect mastication of the farinaceous articles of diet, and indeed of all the food, should be strongly insisted upon. Hot liquids, and especially tea and coffee, should be almost permanently excluded, and should when possible be replaced by milk and water, or by cocoa made from the nibs. Malt liquors are generally found to cause flatulence, and to aggravate the pain. Dr. Brinton has, however, observed that they sometimes agree in the case of elderly people. When stimulants appear to be required dry sherry or pale brandy, in small quantities and largely diluted with water, is the best that can be taken. Sugar, since the objection made to its use by Cruveilhier, has fallen into general disrepute, and it should certainly be only moderately indulged in. It is a powerful stimulant to the mucous membrane of the stomach, and it also easily undergoes acid fermentation—properties which tend to render its use undesirable.

"2, 3. The therapeutic measures under the second and third divisions include most of the remedies ordinarily employed in the treatment of ulcers of the stomach; and it is a question how far their action is directly excited on the disease itself, or in what measure their beneficial agency is due to their influence on the surrounding mucous membrane. The main object in the latter direction is to diminish hyperæmia and its causes, and to check catarrhal action; but as these indications can scarcely be distinguished separately, it will be best to speak of individual remedies which may be employed for these purposes. The influence of bismuth in these disorders is too well attested to need any apology for placing it among the first on the list of appropriate remedies. Its beneficial effects in catarrhal conditions of the mucous membrane have been already treated of. Whether or not it exerts any direct influence on the ulcerated surface may be open to question, but such an action would at the least not appear improbable. It appears also to exercise an influence in checking hypersecretion, and for this purpose may be advantageously combined with kino and opium, both of which possess a similar power, or with opium or morphia alone when this symptom is less marked. It may be administered in the form either of the subnitrate or subcarbonate suspended in mucilage. I have rarely found it necessary to administer a larger quantity than ten grains for a dose, repeated four times in the twenty-four hours; but Dr. Brinton has employed larger quantities, as a scruple. Opium is the remedy chiefly to be relied on for the relief of the pain and vomiting. The amount given should be sufficient for the more or less complete removal of the pain; and in severe cases several grains of the crude drug may often be given advantageously, in divided doses, in the course of twenty-four hours. The utility of the salts of silver has been warmly disputed. There can be little probability that the nitrate in the small doses in which it can be administered (which should rarely, if ever,

exceed half a grain to a grain) exercises an action on the surface of the ulcer similar to that which follows its application to external parts, since so large a proportion must, from the mucous present in the stomach, be immediately converted into the insoluble chloride. Its agency, however, in catarrhal affections of the stomach, and in cases where from the pain and vomiting there may have been great reason to suspect the presence of an ulcer, is so unquestioned that, though standing second to bismuth as a remedy in this disease, it may be regarded as a valuable adjuvant to our resources in cases where this remedy does not appear to exercise its wonted beneficial effects, and it will sometimes be found to relieve pain after bismuth has failed. The employment of alkalies, among which may be included the bicarbonates of potash, soda and magnesia, and lime-water, should be restricted to those cases where, together with flatulency, there is evidence of acidity resulting from fermentation in the food. The presence of free acid of this nature must exercise an injurious influence, both on the surface of the ulcer and on the mucous membrane of the stomach, which may be appropriately neutralized by these remedies given between meals. Under other circumstances their use is injurious, as tending, when given on an empty stomach, to excite the secretion of the gastric juice; and, except as simple palliatives, they are of no value in the acidity resulting from hypersecretion, which is best controlled by the treatment before mentioned. In cases, however, where they are applicable the use of the natural or artificial Carlsbad-water has been found advantageons, and it has been highly praised by Ziemssen for its aperient action. Ziemssen considers that, in addition to the neutralization which it effects on the acid contents of the stomach, it has the further beneficial action that it tends to promote peristaltic action of the viscus, and thus to prevent undue delay of the food in its interior and consequent fermentative processes. When the severer symptoms have subsided, if there be

evidence of anæmia, the use of iron may be advantageously resorted to. The neutral preparations—such as the ferrum redactum, the ferri ammon. cit., or potass. tartrat., the carbonate of iron, or the mist. ferri co.—are those most suitable. They should at first be given in small doses after food, and their employment is to be discontinued if pain supervene. The recommendation of Abercrombie of the ferri sulph. in combination with aloes has been indorsed by Henoch; but I confess that I regard those above mentioned as safer remedies in these cases. Pain of a severe kind, indicating the extension of the ulcer, requires additional care in restriction of the diet, and in enforcing absolute rest. It is, as has been already stated, most effectually relieved by opium, to which, for this purpose, hydrocyanic acid is decidedly inferior. The effect of position should also be tried. Warm cataplasms and fomentations also afford relief, and a marked effect of this kind is sometimes produced by the application of a few leeches over the epigastrium, especially if the pain is localized in this region. Their number should, however, be limited to two or three, and it is not necessary or desirable to encourage free bleeding. Counter-irritation does not seem desirable during the attacks of severe pain; and in some instances, when an ulcer has appeared to have formed adhesions near the surface, the application of a blister has been followed by increased suffering; but in the intervals and during the course of the disease the use of remedies of this class has been recommended by many careful observers, and when combined with other suitable measures appears to have conduced to a cure. Osborne recommended an issue made with caustic lime, but the least distressing counter-irritants are either mustard poultices, small blisters not exceeding the size of a five-shilling piece, or friction with croton-oil.

"4. Pain is also frequently alleviated by the warm bath, and the prolonged use of this remedy has been recommended both by Cruveilhier and by Andral, not only for this purpose,

but also as an aid in checking vomiting. The pain of flatulent distension and spasm, though often relieved by opiates, requires occasionally from its severity a departure from the general principles of treatment observed in these cases. Emetics can not be too strongly forbidden; but the use of warm liquids sometimes relieves the spasm and promotes the evacuation of the flatus, or even the regurgitation of the contents of the stomach, in which these attacks commonly end. The aromatic spirit of ammonia may also be used for the same purpose. Nausea and vomiting may be treated, in addition to the remedies before quoted, by ice in small quantities, and by effervescents containing hydrocyanic acid, though the latter are of less efficacy than preparations of opium. This symptom, when obstinate, requires the most extreme restriction of the diet; and it is often advantageous during some hours, or even some days, to avoid introducing any food into the stomach, and to maintain the strength of the patient by nutrient enemata given in as small a bulk as possible. Milk, beef-tea, eggs, and, if necessary, small quantities of brandy, may be given in this manner; and Dr. Brinton, on the advice of Dr. Hawkins, employed cod-liver oil for this purpose with beneficial results. Even opiates may thus be administered with advantage when rejected if given by the mouth. Thirst may be quenched by slowly sucking small pieces of ice. Vomiting appears in some conditions to be maintained by a loaded condition of the bowel, and in these the administration of a purgative enema is often beneficial.

"5. Hemorrhage must be controlled by cold and by direct astringents. I have found none so dependable as the acetate of lead given in doses of three or four grains, in combination with a quarter of a grain of opium, every two or three hours. Turpentine has been recommended by Hunter, and its utility has been confirmed by Drs. Graves and Seymour. Dr. Budd thinks it more useful in cases of capillary hemorrhage than when the blood proceeds from larger vessels. The use of

other remedies of this class will be further alluded to. Ice internally may be employed with advantage for the same purpose, and this agent and also opiates are useful in checking the movements of the stomach in the effort of vomiting, by which the tendency to bleeding is necessarily aggravated. During the continuance of this symptom the most absolute rest of body must be enjoined. The diet should be restricted in the same manner as when vomiting is present. When severe collapse is threatened stimulant enemata may be given and ether inhaled. It is important also to watch the fæcal evacuations after the hematemesis has ceased.

"6. Constipation is always to be treated with caution. An almost universal consent has proscribed mercurial preparations as injurious. When it does not nauseate or cause vomiting there is no better laxative than castor-oil; but in the numerous instances in which its use is prevented by the intolerance of the patient the best substitutes are aloetics and the pil. colocynthidis composita. The administration of purgatives by the mouth should, however, as far as possible be avoided, and the action of the bowels assisted by cold or tepid enemata, in which manner also castor-oil may be beneficially employed.

"7. When perforation is threatening or has occurred the most absolute repose to the patient and also for the stomach is an object of primary importance. In the former case Miquel has recommended that such a position should be maintained as to leave the ulcer free from contact with the contents of the stomach. When the event has taken place no agent appears to have any curative influence but opium, and its use must be continued for many days. The nutrition must be also conducted entirely by enemata. The only favorable recorded terminations to this event are those where these plans were pursued. If life should fortunately be prolonged, the importance of a long-restricted diet, so as to avoid the distension of the stomach, can not be too strongly insisted

upon. Finally patients should be warned that in intervals of comparative immunity from urgent symptoms they are still in danger of relapses; and a case by Cruveilhier, in which a return of the ulceration after many years of immunity followed the free exhibition of purgatives for a cerebral affection, may well awaken the question put by that distinguished author, whether these remedies were not truly the cause of the relapse, and should induce caution in all treatment, hygienic and medicinal, of patients in whom the disorder has once existed. The later effects arising from constriction of the pyloric orifice may be obviated by the use of a diet chiefly solid in order to avoid distension by flatulence, or, when this has occurred, by the employment of the stomach-pump after Kussmaul's method."

Procidentia Recti.—Mr. Allingham, in his work on Diseases of the Rectum, says of treatment of protrusion of the rectum in children that it is generally successful. It should first be addressed to the removal of any source of irritation. This accomplished, a cure is speedily effected. When no source of irritation can be discovered, the general health must be attended to. The child should never be allowed to sit and strain at stool. The motions should be passed lying upon the side at the edge of the bed, or in a standing position, and one buttock should be drawn to one side, so as to tighten the anal orifice while the fæces are passing. This device he has found to be very useful.

When the bowels have acted the protruded part ought to be well sluiced with cold water, and afterward a solution of alum and oak-bark, infusion of matico, krameria, or weak carbolic acid, should be thoroughly applied with a sponge. The bowel must then be returned by gentle pressure, and the child remain recumbent for some little while, lying upon its face on the couch, before running about. If there be any intestinal irritation, he generally orders small doses of hydrarg.

cum cretâ, with rhubarb at bed-time, and steel wine two or three times in the day. When the child is very ill-nourished cod-liver oil does much good. The diet should be nourishing and digestible. If these mild measures do not succeed, he finds the application of strong nitric acid the best remedy. Chloroform should be given, and the protruded gut well dried. The acid must be applied all over it, care being taken not to touch the verge of the anus or the skin. The part is then to be oiled and returned, and the rectum stuffed thoroughly with wool. A pad must after this be applied outside the anus, and kept firmly in position by strapping-plaster, the buttocks being by the same means brought closely together. If this precaution be not adopted, when the child recovers from the chloroform, the straining being urgent, the whole plug will be forced out, and the bowel will again protrude. When the pad is properly applied the straining soon ceases, and the child suffers little or no pain. He always orders a mixture of aromatic confection, with a drop or two of tincture of opium, so as to confine the bowels for four days. He then removes the strapping and gives a tea-spoonful of castor-oil. When the bowels act the plug comes away, and there is no descent of the rectum.

He has had experience of this treatment in a great many cases, and has never known it to fail if properly carried out, and only on two occasions has he had to apply the acid more than once. The result also is not a temporary but a permanent benefit.

The Efficacy and Mode of employing Collodion in Erysipelas.—M. Broca has again recommended the application of collodion in cases of erysipelas in the following manner: a layer of collodion should be applied round the margin of the erysipelatous blush for a distance of from six to eight centimetres, and also over the affected part. The object of the former is to exercise a circular compression, so as to

separate the affected part from the rest of the cutaneous surface. It is necessary to examine these layers once or twice daily, and to repair the fissures which occur. The collodion used must be free from oil. It is rare to see the erysipelas spread after these applications, under which it is in a short time extinguished.

Collodion is extensively used in many English hospitals, and, we believe, with good results. It should first be applied to the healthy skin, in three or four layers, extending to a distance of at least three inches from the margin of the erysipelatous blush, and afterward over the diseased surface. The object of this method of proceeding is to prevent the conveyance by the brush of any material which may possibly be of a contagious nature. At some large hospitals the ethereal solution of nitrate of silver is much used, and with fairly good results. The objections to it are twofold: first, on account of its blackening effect, which prevents one seeing if the disease be spreading; and secondly, because of its disfigurement, especially when applied to the face. This latter effect, surgically considered, is of little importance, but the first influence on the minds of relatives is occasionally not a little astonishing. We can not here discuss the questions as to whether erysipelas is purely local in its origin, in the local idiopathic sense, or requires a previous traumatism, either accidental, surgical, or pathological, which may be excessively minute; or whether it necessitates an anterior constitutional state which predisposes to its occurrence. No doubt the solution of these problems might modify our treatment; but in the mean time experience has taught that general as well as local remedies are necessary in the large majority of cases, and topical applications are used, while general treatment, in the way of iron, iodine, etc., by those who believe in them, and stimulants almost universally, are employed. Before we can say with any approach to certainty that a certain remedy or combination of remedies acts in any special or general way,

we must have a much larger experience of the natural history of disease, of its duration first without and then with certain methods of treatment, and of similar modes of medication in various individuals. Various other procedures of experiment and observation, by which we may test the value or inutility of our interference, suggest themselves to the mind; and it would be a great step in the right direction if an army of duly-qualified medical observers and experimenters could be organized to undertake the examination of certain leading questions in the domain of therapeutics. (Edinburgh Medical Journal.)

Mercurial Treatment of Syphilis.—A discussion took place at the Medical Congress of Lyons, at the end of September last, which, from the importance of the subject, the competence of the speakers, and the exclusively practical nature of the arguments advanced, is worthy of attention. The Congress of Lyons shows that syphilographers are divided into three classes—the mercurialists, the non-mercurialists, and the eclectics. Among the first were included MM. de Méric, Pacchiotti, Clerc, Drou, and Rodet; among the second, MM. Armand Després and Drysdale; and among the third, MM. Diday, Gailleton, and Clément. Experience, it was argued by M. Clément, teaches us that if mercury does not attack syphilis, it at least affects its manifestations to an extent indeed that it may be said to abolish its effects, so that a syphilitic man may procreate perfectly healthy children. To this view many of the speakers were inclined, but considerable difference of opinion existed as to whether mercury should be given to a man who had simply a chancre. M. Diday adduced seventy-four observations directed to this point. Of these twenty-five had been at once submitted to mercurial treatment, while forty-nine only had general treatment during the primary period. Among the twenty-five, secondary affections appeared on the average forty-nine days

after the appearance of the chancre; while in the forty-nine, secondary affections appeared forty-three days after the *debut* of the chancre; that is to say, six days sooner than the others. The effect of the mercury would therefore appear to be very slight on the secondary action of syphilis. M. Diday, however, further found that in the patients non-mercurialized at the outset slight secondaries occurred in thirty-four per cent. and severe in ten per cent; while in those who had taken mercury during the period of chancre the ratio of slight cases was only twenty-four per cent. and of severe twenty per cent. M. Diday concludes that the intensity of syphilis depends less on the treatment adopted at the outset than upon the constitution of the patient and the extent to which the general principles of hygiene have been observed. M. Clerc, who is a strong mercurialist, pointed out various circumstances that in his opinion explain the want of success frequently met with in the use of this remedy. First, it is given in insufficient doses; there is nothing to fear in producing slight stomatitis. Secondly, there are often defects in the mode of administration. Thirdly, hygienic conditions are often neglected. Insufficient exercise, the abuse of wine and tobacco, debauchery, often obviate the good effects of a mercurial course.

M. Clerc commences the administration of mercury as soon as the chancre appears, because from this date the system is affected. He does not believe or anticipate that it will arrest its development entirely, but he thinks it exerts a material influence in retarding their appearance and reducing their violence. M. Gailleton, a partisan, like M. Diday, of the doctrine of successive developments and extensions of the disease, employs the mercury only when secondary symptoms have manifested themselves; there he thinks it stops. M. Rodet, of Lyons, commences the use of mercury at once after the chancre has made its appearance. He pushes the remedy vigorously, and changes the preparation frequently, to get a speedier and more prolonged action. Commencing generally

with the bichloride in increasing doses, he exchanges it for a time after the protiodide; and finally, gradually diminishing the quantity of this, replaces it with iodide of potassium. M. Pacchiotti thought that mercurial frictions had been too much neglected; while M. Drou alluded to the employment of the method of subcutaneous injections, which he was of opinion might sometimes be advantageously employed instead of other plans. (Practitioner.)

A Remedy for Colds.—Dr. Dobell, in his work on Winter Cough, declares that *colds can be stopped without lying in bed, staying at home, or in any way interfering with business—provided* the treatment be begun directly the first signs of catarrh show themselves in the nose, eyes, throat, or chest. When the cold has become established it will not answer. The treatment is as follows: 1. Give five grains of sesquicarbonate of ammonia and five minims of liquor morphia in an ounce of almond emulsion every three hours. 2. At night give an ounce and a half of liquor ammonia acetatis in a tumbler of cold water, after the patient has got into bed and been covered up with several extra blankets; cold water to be drunk freely during the night should the patient be thirsty. 3. In the morning the extra blankets should be removed so as to allow the skin to cool down before getting up. 4. Let him get up as usual and take his usual diet, but continue the ammonia and morphia mixture every four hours. 5. At bedtime the second night give a colocynth pill. No more than twelve doses of the mixture from first to last need be taken, as a rule; but should the catarrh seem disposed to come back after leaving off the medicine for a day, another six doses may be taken and another pill. During the treatment the patient should live a little better than usual, and on leaving it off should take an extra glass of wine for a day or two.

Notes and Queries.

Kentucky State Medical Society.—The next annual meeting of this Society will be held at Paducah, commencing on Tuesday, the first day of April. From the exercises provided the meeting promises to be one of the most spirited and interesting ever yet held by the Society. Dr. Lewis Rogers, its president, and the foremost physician of Kentucky, will deliver an address on the occasion, which alone ought to be sufficient to secure a large attendance. Delegates from the State Societies of Tennessee, Ohio, and Indiana are expected to be present, and reports are promised by numerous committees. Kentucky, we believe, will do herself justice at this meeting of her Medical Society.

Revaccination.—The health officer of Springfield, Mass., is a woman. Shortly after her appointment to the place one single young man had her to vaccinate him twenty-five times, in quick succession. We always have believed that this would be the way in which the "dear creatures" would be imposed upon.

Woman, "Coy and Hard to Please."—The Philadelphia Medical Times is responsible for the following: "After a recent examination of female teachers in Ohio some of the unsuccessful candidates complained that injustice had been done them, whereupon the examiners were so cruel as to publish extracts from the papers written by the rejected applicants. The following are a few specimens of the answers: 'The food is first masticated and then passes through the

phalanx;' 'Respiration is the sweating of the body;' 'The chest is formed of two bones, the sternum and the spinal cord.' "

Medical Commencement.—The Commencement exercises of the Medical Department of the University of Louisville, at Public Library Hall, on Monday evening, the 3d instant, drew out an immense audience of ladies and gentlemen. The diplomas were presented with brief and pertinent remarks by Hon. Isaac Caldwell, President of the Board of Trustees. The following is a list of the graduates, seventy-five in number. In another department will be found the valedictory address delivered by Prof. L. P. Yandell, jr., on the occasion.

Adams, Robt. J., Ark.
Avritt, Beauford E., Ky.
Bowmer, Wm. F., Mo.
Barnett, Jas. B., Ky.
Bryant, Jas. W., Ga.
Brown, Greenberry, Ky.
Brown, Wm. A., Ky.
Chaffin, Nat. W., Tenn.
Cheatham, Wm., Ky.
Carter, Henry C., Tenn.
Chambers, L. W., jr., Ky.
Covert, Geo. M., Ind.
Crinnian, L. A., Ky.
Dodge, Robt. A., Ky.
Donohue, Jos. P., Ky.
Dunn, Jos. S., Ark.
Dale, Chas. T., Ky.
Daniel, John W., Ga.
Ewing, James D., Ky.
Evans, James T., Miss.
Ezell, Jefferson, La.
Farr, Patrick H., Miss.
Fowlkes, Wm. E., Ky.
Gregory, Joseph P., Tenn.
Green, Wm. O., Ind.
Griffith, Thos. J., Ind.
Goodwin, Albert, Ga.
Helmke, Jno. N., Ky.
Harbison, Hugh, Texas.
Henderson, Wm. E., Miss.
Hogan, Saml. M., Ala.
Hon, Benton J., Ind.
Hicks, Wm. B., La.
Hadden, Louis, La.
Jackson, Jas. W., Ky.
Jones, Francis, Ky.
Jones, Jno. A. R., Ala.
Kendrick, Carroll, Miss.
Kirkwood, Jas. W., Ind.
Keith, Wm. A., Ky.
Lewis, Chas. C., Ky.
Linder, Jas. L., Ga.
Letcher, Jas. H., Ky.
McCall, Warren J., Tenn.
McMorries, Joseph, Miss.
McWilliams, James, Ky.
Montgomery, U., Ky.
Martin, Robt. W., Ind.
Noel, Jas. W., Ark.
Nichols, Thos. C., Ky.
Prewitt, Richard C., Ky.
Pitman, Harvey S., Ky.
Pearson, E. C., Miss.
Poyntz, Jas. M., Ky.
Rather, John T., Texas.
Stewart, Benjamin, Ind.
Sauls, Burrell, jr., Tenn.
Shipley, Benj. J., Ky.
Stalker, Benj. F., Ind.
Spurgeon, A. N., Ind.
Smith, C. P., Miss.
Soudergild, Edward, Ky.
Shute, Ira E., Ky.
Selfridge, Wm. R., Ind.
Thomas, Edmund G., Ky.
Van Gasken, Jos., Del.
Wood, Buford T., Ky.
White, Wm. W., Tenn.
Watson, Stuart S., Ky.
Webb, John G., Ky.
Ward, Chas. E., Ga.
West, James H., Ky.
Woods, Thos. B., Ala.
Walls, Matthew S., Ark.
Whitledge, Wm. T., Ky.

The *Ad Eundem* degree was then conferred upon Daniel H. Shipman, M. D., of Tennessee, a graduate of the University of Nashville; Wm. J. Moore, M. D., of Kentucky, a graduate

of the Kentucky School of Medicine; and J. N. McCormick, M. D., of Kentucky, a graduate of the Miami Medical College, Cincinnati.

The conferring of degrees was followed by the bestowal of prizes, which was done in accordance with the following report of the committee whose duty it was to make the awards:

The Faculty gold medal is awarded to Dr. Carroll Kendrick for the best written thesis apart from that thesis to which the gold medal of Professor Bell is awarded. To Dr. Stuart S. Watson is awarded the gold medal offered by Prof. Bell for the best thesis on Public and Private Hygiene. The prize offered by Messrs. Arthur Peter & Co., a case of pocket instruments, is awarded to Dr. B. B. Stuart for the second best thesis. To Dr. C. C. Lewis is awarded the prize offered by John P. Morton & Co., Reynolds's System of Medicine, for the best notes on the clinical surgical lectures of Prof. D. W. Yandell.

Among the theses placed before the committee of the Faculty for comparison and judgment are some of great merit. The committee commend the following authors of these theses for honorable mention: Drs. Francis Jones, of Kentucky; Thos. J. Griffith, of Indiana; Wm. E. Henderson, of Mississippi; Jos. D. Donnohue, of Kentucky; Jas. W. Kirkwood, of Indiana; Cotesworth P. Smith, of Mississippi; Jos. S. Dunn, of Arkansas; W. E. Fowlkes, of Kentucky; Ira C. Shute, of Kentucky; and John W. Daniel, of Georgia.

The prize offered by Dr. Cowling to the student standing the best examination in anatomy has been awarded to Mr. W. G. Todd, of Kentucky, a first-course student. The committee make honorable mention of Dr. J. Van Gasker, of Delaware. The prize offered by Mr. Simon N. Jones, of "The Pharmacy," to the most skillful operator in Dr. Cowling's special course upon operative surgery has been awarded to Dr. W. R. Selfridge, of Indiana, with honorable mention of Dr. J. McWilliams, of Kentucky.

"Rejected Addresses."—Miss Sophia J. Blake, the head and front of the female aspirants for medical honors at the Edinburgh University, came up for examination recently, but failed to pass; or, in British student phrase, was "plucked."

A Case of Lithotomy.—Dr. George Cowan, of Danville, Ky., adds the following to the statistics of lithotomy: "The patient was a negro boy, aged eleven years. The stone was encysted. The operation was the 'lateral,' and performed in July, 1872. The operator experienced difficulty in detaching the calculus, a difficulty much enhanced by violent spasm of the bladder, but succeeded finally in removing an egg-shaped stone, of the phosphatic variety, having a uric-acid nucleus, with a few layers of oxalate of lime; measuring one inch and three quarters in length, and weighing nine drachms. The patient made a rapid and complete recovery."

Errata with a Vengeance.—In order that the readers of the American Practitioner may have the benefit of the correction of a chapter of errors, we reprint here a note from the junior editor of this journal, which recently appeared in the columns of our spirited contemporary, the Philadelphia Medical Times.

"*To the Editor of the Philadelphia Medical Times:*

"Dear Sir—The writer is the unfortunate author of a paper published in the last volume of the Transactions of the American Medical Association—a paper which has suffered most grievously from careless proof-reading. Permit me to point out some of the errors, and their character will sufficiently indicate that the epithet careless is not at all too strong. On page 126 of the volume referred to I find 'accommodations' substituted for accumulations, and 'insidious' for invidious; in each instance the substitute destroying the meaning of the sentence in which it occurs, if not making utter nonsense. On page 127 the words 'round-shirts,' 'persistence,' and 'decorations' are given for roundabouts, penitence, and declamations. On the next page the reader finds in part of a sentence the following: 'Carlyle, Mill, Huxley, and Rankin,' and possibly wonders who Rankin is. Ask the intelligent and careful proof-reader. The author wrote Ruskin. On page 130 a sentence reads as follows: 'And possibly too the best ideal of a medical journal has not yet been obtained, has not yet been developed with the actual.' Replace 'obtained' by attained,

and 'with' by in, and the sentence is tolerable; but as printer and proof-reader have made it it is intolerably bad. Other errors almost as mortifying as those that have been mentioned can be found; but the list is long enough. A man, no matter how poor he is, does not like to see his children, no matter how homely they are, walking the streets in rags. Almost equally as trying is it for one to have the children of his brain thrust ragged and disorderly before the public, when the rags and disorder are not of his producing. Now the moral of the story is, in my opinion, this: Authors have the right, and should always have the opportunity, of correcting their proof. T. P."

Prof. Tyndall.—If this name has not been remarked on account of its honorable association with science, doubtless it has become familiar to our readers from its connection with what has of late been much spoken of and written about as the "Prayer Test." That banter of Prof. Tyndall's to the religious world was a very foolish one, and has brought much obloquy upon his name. Newton, it has been said, indemnified mankind for his superiority over them in mathematics by the weakness he displayed in his writings on divinity. We will not say that the remark is applicable to Tyndall; but we confess it gratifies us to see that at a banquet given to him in New York, a few evenings since, his theological vagaries were properly rebuked.

The occasion was flattering to his pride, and the speeches were as complimentary to him as he could have asked; but he no doubt felt that among his American friends present were some very plain-spoken men. He could hardly have helped feeling the point of the satire contained in the following remarks of Mr. Parke Godwin, who spoke in behalf of the press:

"But it is real science, with its rigid restrictions to its own sphere and its exact methods, and not any pseudo-science, that will accomplish these grand results. As all is not gold that glitters, so all is not science that bears the name. Dean Swift in his day humorously complained that Grub Street had migrated to the

Royal Society. Well, we can not say that things are as bad as that; but certainly there are some ragged and suspicious-looking fellows lurking about the premises; and as the duty of the press, like Dogberry, is to comprehend 'all vagaries,' we so bid these 'stand.' For example, a German doctor was around the other day, who informed us that with matter and force he could very easily reconstruct every thing there is in the universe. He did not tell us what matter and force are apart from the mind which conceives them as phenomenal relations; but he was sure of his point, and that was enough. It was not, however, an original notion. That learned traveler, Dr. Lemuel Gulliver, in his authentic and veracious narrative called 'A Voyage to Laputa,' encounters a Doctor of the Academy of Lagoda who was quite up to the modern mark. He possessed a machine, of which the drawings are given, into which you might throw a vocabulary, some bits of wood, and a few pieces of paper, and then, by turning a crank, out of those rough materials would come a whole body of the arts and sciences—folio volumes of philosophy, poetry, politics, and law—printed and bound, all complete, without any expense of labor, or any assistance from genius and study. You will see this is ridiculous; but it is not a whit more so than those more recent theories which would account for the universal frame of things, every part of sculptured order, and a luscious beauty, every part teeming with an intelligence that moves our wonder and delight, on mere mechanical principles.

"Then there is another of these outside teachers of science—but this one entitled to the highest respect, though I think he rides a hobby beyond the capacity of the creature to carry—who contrived a vast process of cosmic evolutions; who tells us that a great while ago, ten thousand years—no, a hundred million of millions of millions of years ago—nebulous gas was diffused through the immensity of space, which first twisted itself into a solar system, then into a world, then into layers of mineral strata, then into vegetable sporules, into animal motion, into human vortices called societies, into Iliads, Parthenons, and Skakespeares, and at last into a grand philosophy of evolution—the crown and consummation of the whole—which may all be true, though the truth strikes me as hardly worthy of so long and so tremendous a parturition.

"Again, a third convinces himself and his admirers that the universe is considerably defective; and that, like Alphonse of Castile, had he been consulted in the making of it, he could have given

many useful hints toward its improvement; and so too, when the deepest human instincts in all ages have repeated what the Hebrew peasant said, gazing into the clear depths of the Eastern skies, 'The heavens declare the glory of God, and the firmament showeth his handiwork,' cries, 'Pish, the heavens declare the glory of Hoffenchor, Kepler, and Newton.'

"Then there is another French *litterateur*, who, with all his undeniable merits, masquerades a little too much in the habiliments of science; who is very sure that Mind and Motion are but the obverse sides of the same essential phenomena, the one coming in by the front door of the consciousness and the other by the back door of the senses. When you talk, he says, of the martyr's faith, the heroic devotion, the mother's love, the poet's fancy, the artist's genius, the lover's rapture, you are only giving so many different names to so many different movements of little molecules in the brain; up, down, hither, thither, this way, that way, etc. But my opinion is that the ingenious gentleman, when he comes to the truth of the case, will find that what he terms molecules are only maggots, of which a very fine specimen has found its cradle and home in his own capacious cranium. This is a clear case of Grub Street, as a friend remembers, getting into the Royal Society. Now if this be science, we must exclaim with the poet:

> 'O star-eyed science! were there wonders then,
> To waft us back a message of despair?'

"Is this all the tidings ye bring from the empyrean? What! is there nothing at the central-wheel of life but a blind, dumb, insensible, unknowable face—a face without love, without intelligence, without desire and purpose; an eyeless Samson, which goes grinding on forever at his mill, and crushing onward forever in a fruitless, endless battle against death, and nothing more? 'Great God!' as Wordsworth says:

> 'Great God! I'd rather be
> A Pagan, suckled on a creed outworn,
> So might I, standing on this pleasant lea,
> Have glimpses that would make me unforlorn.
> Have sight of Proteus rising from the sea,
> Or hear old Triton blow his wreathed horn!'

"No! There are conjecturers that impose upon us their own fantastic offspring for the legitimate heirs of science. Science is exact and certain and authoritative, because dealing in the fact,

and the systematic co-ordination of facts only. She does not wander away into the void. She has nothing to do with questions of personal origin nor of ultimate destinies; not because they are unimportant questions or insoluble, but because they transcend her instruments and her methods. She leaves them to philosophy, which proceeds, not by demonstration and proof, but by insight, by intuition, and by moral reasoning; or she leaves them to Revelation, in whose supernal light alone they can be properly illuminated and fully seen."

On the same occasion a letter was read from Dr. O. W. Holmes, concluding thus:

"We can trust the apostles of the new movement to take care of themselves, and we need not fear that any belief which is fit to live will ever die. All opinions disproved by the facts of to-day must certainly yield to that subtile process of interstitial decay and renovation by which the intellectual life of mankind is born again from generation to generation almost without knowing it. But we may be perfectly sure that there is not any thing that is in heaven above, or that is in the earth beneath, or that is in the water under the earth, which can contradict the evidence that there is something higher than the firmament and more stable than the solid continents and deeper than the unsounded depths of the ocean—the law above all laws—which shows our reason what we ought to be, and commands our will in the authoritative accents of duty.

'Thou dost preserve the stars from wrong,
And the most ancient heavens by thee are fresh and strong.'"

THE AMERICAN PRACTITIONER.

APRIL, 1873.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

FACTS AND REMINISCENCES OF THE MEDICAL HISTORY OF KENTUCKY.*

BY LEWIS ROGERS, M. D.,

President.

GENTLEMEN OF THE SOCIETY:

I esteem it a very high honor to be the presiding officer of the Kentucky State Medical Society, an association composed of members, past and present, many of whose names are among the most distinguished of this country. I deem myself specially fortunate in being permitted to enjoy this honor in the prosperous and hospitable metropolis of Western Kentucky. I am pleased with the centrifugal movement which this meeting inaugurates. Heretofore we have met in the more central parts of the state; hereafter we may indulge the hope that the members from the remote parts will more fully participate in our proceedings, and contribute the result of their varied observation and study to the common stock.

*An Address before the Kentucky State Medical Society, at Paducah, April 1, 1873.

I am sure that I shall not be mistaken in the expectation that this meeting in Paducah will add greatly to the future usefulness of the Society by enlisting new and zealous workers who have not heretofore been associated with us.

As the time for our annual reunion approached, my mind became somewhat solicitous as to the subject of this address. What shall I or what can I write about that had not been presented to you in a more attractive form than I felt that it was possible for me to present it was naturally a question of much anxiety to me. The subject of medical education was "a thrice-told tale." In all of its many important phases, as connected with medical schools and office instruction, it had been discussed over and over again much more ably than I could discuss it. This would not do. And so in regard to the amount and the kind of education which should be required as preliminary to the study of medicine. This had formed the vexed topic of many an interesting debate before this body and elsewhere. Sanitary science, in all of its wide range, had often been pressed upon your attention and disposed of as it should be. I could add nothing to it. And so again with the Anatomy Bill, with the law for the government of apothecaries, and many other matters of equal and even greater moment. They all have reference to the present or future interests of the public and the profession, and I have felt so sure that they would continue to command the public and professional mind until their beneficent purposes were accomplished that I could but deem it unprofitable to raise my voice in their behalf.

The history of medicine in Kentucky, the remarkable record which the profession has made since the very infancy of the state, are topics which may be recalled with just pride and very great pleasure. I propose to speak of some of these by-gone things as "Facts and Reminiscences of the Medical History of Kentucky." Many of the facts are already familiar

to you in a fragmentary form; it may not be unprofitable or uninteresting to view them in a group. My own reminiscences may be received for what they are worth.

Whatever may be the present status of Kentucky medicine—and I hold that it is high—the past at least is secure. When Kentucky was to a large extent a wilderness, and not yet wholly free from hostile incursions of the Indians, when the population was so sparse as scarcely to give encouragement to any educational enterprises except such as were necessary for the simplest branches of learning, the interests of medicine were not only not neglected but received conspicuous regard.

In 1798 "Transylvania Seminary" and the "Kentucky Academy" were united under one board of trustees, with the name of "Transylvania University," and in 1799 law and medical departments were added to the academical. Dr. Samuel Brown was appointed the first professor of medicine in Transylvania, and the *first* in the West. Dr. Francis Ridgeley was appointed a professor in the University shortly after Dr. Brown, and was the *first* to deliver a course of medical lectures in the West. From 1799 to 1817 various appointments were made in the medical department, and partial courses of lectures were delivered. During this interval, among the locally-distinguished men who were appointed to professorships, none were more remarkable than Dr. Joseph Buchanan. He died in Louisville in 1829; and I call up from the memories of my boyhood, with great distinctness, his slender, flexible form, massive head, and thoughtful, intellectual face. He was a man of great and varied powers of mind. He was a mechanical, medical, and political philosopher. His "spiral" steam-boiler, the prototype of the exploding and exploded tubular boiler, and his steam land-carriage, were among the wonders of the day. As a physician, his papers attracted distinguished notice from the medical *savans* of Philadelphia, then the great center of medical

science. As a political writer, he was deemed worthy to discuss, and did discuss with power and effect, the momentous problems of special and general political economy agitating the country at the stirring period when Clay, Webster, John Quincy Adams, John C. Calhoun, and Andrew Jackson were the ruling spirits. Dr. Buchanan was then editor of the Louisville Focus, a post for which he was selected by the discerning mind of William W. Worsley, the founder of the Louisville Focus and of the great publishing-house of John P. Morton & Co. If Dr. Buchanan had concentrated his wonderful mind upon some one of the great branches of medicine, he would have added much to the luster of Kentucky medicine. "His full nature, like that river of which Alexander broke the strength, spent itself in channels which had no great name on the earth."

In 1817 a full course was given in Transylvania to a class of twenty pupils, and in the spring of 1818 the degree of M. D. was conferred for the *first* time in the West. John Lawson McCullough, of Lexington, was the *first* graduate in medicine in the valley of the Mississippi. History thus assigns to Kentucky the honor of inaugurating the teaching of scientific medicine in the West. The first to begin, she has occupied the most prominent position in this field of education to the present time. Her schools have been the most popular, her classes the largest, her professors the most learned, her graduates the leading practitioners of the South and West, her influence upon practical medicine and surgery greater than that of all other schools.

Ranck's History of Lexington states "that vaccination had been introduced for several years in Lexington by Dr. Samuel Brown, of Transylvania, when the first attempts at it were being made in New York and Philadelphia. Up to 1802 he had vaccinated upward of five hundred persons in Kentucky." This invaluable discovery was announced by Jenner in 1798, and we find it successfully introduced into

the backwoods of the West, by Kentucky enterprise, before 1802. The Kine-pock Institution of New York was established in 1802.

The Eastern Lunatic Asylum has long enjoyed a distinguished place among institutions of the kind in this country. Dr. W. S. Chipley, for so many years the eminent superintendent of this asylum, has made it known at home and abroad by his valuable reports and other papers upon mental alienation. This asylum was founded in 1816, under the name of the "Fayette Asylum." It was the *first* ever established in the western country, and the *second* state asylum opened in the United States.

In connection with the history of medicine pertaining to Lexington, Dr. B. W. Dudley must ever occupy a conspicuous place. Distinguished in every branch of surgery, he was particularly eminent, as we all know, as a lithotomist. If not the first surgeon to perform this operation in Kentucky and the West, he was the first lithotomist in the number and successful results of his cases of the period in which he lived. His fame was co-extensive with surgical literature.

If Kentucky had conferred no other benefaction upon mankind, the operation of ovariotomy performed for the *first* time by Dr. Ephraim McDowell, of Danville, in 1809, would entitle her to immortal honor. I believe that no one now denies to Dr. McDowell the originality of this heroic surgical achievement. Every surgeon in this country concedes it. In a conversation which I had, in 1865, with a number of eminent surgeons of Great Britain, among whom may be mentioned Mr. Spencer Wells, Mr. Baker Brown, and Sir James Syme, no one had any reserve on the subject except Mr. Syme. While he did not deny the claim of Dr. McDowell, he did not admit it. It is not a little amusing sometimes to notice with what reluctance European writers recognize the great works of American surgeons and physicians. In a recent article in the Edinburgh Review upon the progress of medi-

cine and surgery, the operation of ovariotomy is fully discussed without the mention of Dr. McDowell. Mr. Spencer Wells is made the hero of the operation.

The value of this operation can be better estimated by the statistics of eminent specialists. It is to be viewed as a remedy for a disease of utter hopelessness, if permitted to pursue an undisturbed career. Medicines have no influence over it. Though a few may live many dreary years, the average duration of ovarian tumors is from two to three years. Dr. McDowell operated thirteen times, as far as can be ascertained. He preserved the lives of six out of seven of his first patients. How many of the other cases were successful is not known, though it is certain that several were saved. Up to June last Mr. Wells's ovariotomies numbered 500, with 128 deaths. From March, 1870, to April, 1871, he had a succession of 32 cases in private practice without one death. Dr. Keith, of Edinburgh, up to July last had operated 146 times, with only 26 deaths. Dr. W. L. Atlee, of Philadelphia, has operated about 300 times. Mr. Clay, of Manchester, up to December, 1871, had operated 250 times, with 182 successes. The results may be tabulated, so as to be seen more clearly:

Spencer Wells,	73.25 per cent.	Kimball, . .	66.11 per cent.
Clay, . . .	72.80 "	Dunlap, . .	80.00 "
W. L. Atlee, .	71.00 "	Peaslee, . .	67.85 "
Bradford, . .	90.00 "	Thomas, . .	66.66 "

Keith has attained the highest success yet achieved in Europe, having saved 81 of his first 100 cases, and 30 of his next 36 cases. In the United States the general average is 63 per cent., in Great Britain 60, in France 50, in Germany 41.66. Spencer Wells thinks the average will yet be 90 per cent. of cases in private practice, without excluding those extreme cases in which the operation is performed as a forlorn hope.

My purpose in presenting these details is to call attention to the fact that Dr. Taylor Bradford, of Augusta, Ky., has *already* attained the 90 per cent. success which Wells thinks *may be* ultimately attained. In Kentucky, where the operation was first performed, the *highest* success has been reached.

Peaslee presents the great benefits conferred by ovariotomy in the following words: "It may be shown that in the United States and Great Britain alone ovariotomy has within the last thirty years directly contributed more than thirty thousand years of active life to woman, all of which would have been lost had ovariotomy never been performed."

The Institution for Deaf-mutes, in Danville, Ky., was founded in 1823. It was the first institution of the kind established in the West. It followed closely upon those of Hartford, New York, and Philadelphia. From a small beginning it has become a noble and most beneficent school. Mr. Jacobs, so long its superintendent, has made it known throughout the civilized world. The results attained in the education of deaf-mutes are astonishing. They no longer speak by a manual alphabet or manual signs only, but are trained to utter their thoughts in articulate sounds wonderfully perfect.

Dr. McDowell and Mr. Jacobs have given the name of Danville an illustrious perpetuity, and bequeathed to their successors in that beautiful town a reputation which their pride should be emulous to sustain. It is not an undeserved eulogium to say that Dr. John D. Jackson and his associates of the Boyle County Medical Society uphold very ably the prestige already acquired.

Dr. Alban Goldsmith was an assistant to Dr. McDowell in several of his ovariotomies, and operated himself one or more times. He visited Europe at the time that Civiale was attracting great attention to his original operation of lithotripsy. Dr. Goldsmith, under the teachings of this master, perfected himself in this specialty; and returning to his home

in Kentucky operated on a gentleman in Lincoln County in 1829, the *first* operation of lithotripsy ever performed in Kentucky or in the United States. Dr. Goldsmith, desiring a wider field for his labors, removed to Louisville in a short while. In that city I had the pleasure of seeing him operate in this special way and in other branches of surgery. While residing in Louisville he conceived the project of another medical school, recognizing the importance of a large hospital and its clinical facilities in the teaching of medicine and surgery. To carry out this admirable design he procured from the legislature, in 1833, the charter of the "Medical Institute" of Louisville. A faculty was organized, but did not lecture. When a portion of the faculty of the Medical Department of Transylvania University seceded from that school, in 1837, they organized under the charter of the institute, and continued to act under it until the University of Louisville was chartered, in 1845. Dr. Goldsmith may thus be considered the legal founder of a school so long sheltered by his charter.

From Louisville Dr. Goldsmith removed to Cincinnati, and for a time was professor of surgery in one of the schools of that city; but finally settled permanently in the city of New York, pursuing to the close of his life the special branch of surgery in which he was so skilled. His son, Professor Middleton Goldsmith, is well known to the profession of this state as an able teacher and practitioner of surgery.

Dr. Gross, in his report on Kentucky Surgery, made to this Society in 1852, remarks: "In the treatment of hernia Kentucky may justly claim the credit of having effected one most valuable improvement. The truss invented by Mr. Stagner, and afterward modified by Dr. Hood, has acquired a world-wide celebrity. The value of the invention of Stagner and Hood can be fully appreciated by those only who are familiar with the nature and treatment of hernia, and with the state of our knowledge thereof prior to their time."

In the same report Dr. Gross records "that some years ago Dr. Bowman, of Harrodsburg, showed me an instrument for injecting the parts immediately around the abdominal canals and apertures with a weak solution of iodine and other articles. It was constructed upon the principles of an ordinary syringe, with an extremely delicate nozzle, intended to be introduced through a small opening in the skin. The instrument was successfully used in several cases." We here find the hypodermic syringe foreshadowed, if not actually invented. When Wood published his first papers on the subject of hypodermic medication, I carried out the practice, with the syringe having a delicately-curved nozzle used by dentists, in the treatment of an obstinate case of lumbago. Dr. S. Brandeis, of Louisville, imported the first hypodermic syringe ever used in Kentucky, as he also did, through me, in 1862, the first laryngoscope.

The Louisville Marine Hospital was founded in 1817, and was among the first of the great public charities in the valley for sick and disabled marines. It was sustained partly by taxes upon sales at auction, and partly by a fund created, under a law of the United States, from weekly or monthly sums paid by all sailors navigating the Ohio and other western rivers. This institution was admirably managed. Its trustees were selected from the best citizens of Louisville, and its physicians and surgeons were the *élite* of the profession — mature men engaged in a large and busy private practice. Among them I recall the names of Drs. Richard Ferguson, George W. Smith, Coleman Rogers, Joseph Middleton, John P. Harrison, R. P. Gist, and Llewelynn Powell. Conspicuous in this medical staff, for personal virtues, for the qualities of the Christian gentleman, for all of the attributes of the accomplished physician, it gives me pleasure to single out for special notice Dr. Harrison. My earliest recollections of medicine are associated with this remarkable man. I knew him well, and his history has always been a favorite theme

with me. In this hospital he labored very faithfully, and laid the foundation of a medical career of great usefulness and distinction. Kentucky never produced a more worthy son. He was an assiduous worker at the bedside and in the dissecting-room. He spent many of the long winter nights in the study of all forms of anatomy by minute and careful dissection. Not content with the modicum of anatomical knowledge acquired while attending his several courses of lectures, it was his custom to revise this important branch of study every winter. As a boy, I was often his companion in the fourth story of the hospital. Dr. Harrison was a general as well as a medical scholar. He delighted in all kinds of polite literature. He was peculiar in his habits of reading. The lighter works of general literature occupied his leisure hours in the warm summer months, while the long winter evenings were devoted to the severer studies of the sciences. He was never idle. Of an ardent and active temperament, he could not be idle. He was a man of the purest personal and professional honor. Toward his professional brethren he bore himself with fastidious care. In medical ethics he was a martinet. There were subordinate qualities about Dr. Harrison which should and can pertain to every physician. Every one can not be tall and graceful in form as Dr. Harrison was, with dark hair and complexion and keen gray eyes; but every one can have agreeable manners, a dignified bearing, and be neat in dress and person. Dr. Harrison was always so. He dressed simply but elegantly, and every thing about him looked the refined gentleman. His office was attractive, the furniture good and in order, the books in his large library systematically arranged. When his patients called upon him they were impressed by these things. His horse was always well groomed, his harness bright, and his gig perfectly clean. In all regards he sustained the respectability of his calling. These personal details may seem unworthy of notice in an address like this, but they have an important moral. I am

sure that the influence and usefulness of medical men in cities, villages, and country places, are materially lessened by inattention to such matters as were striking qualities of Dr. Harrison. Personal qualities are often tokens of professional character. Slovenly dress, unkempt hair, a dirty office, with a few broken chairs, and a rickety table with a dusty slate on it, are not likely to inspire the sick with pleasant ideas of their medical adviser. Such conditions spring from and react upon the character of the physician.

Dr. Harrison kept himself fully up with the advances of medicine. The first stethoscope I ever saw, and the first one brought to Kentucky, was imported by him. It was of the pattern originally devised and made by Laennec himself, and was in my possession for many years. Dr. Harrison talked of going to Europe to study this new physical diagnosis of diseases of the chest, but was for a time skeptical as to the reality of Laennec's great revelations.

In this connection my memory calls up the interesting fact that Prof. Henry M. Bullitt, of the Louisville Medical College, was the first physician in Kentucky, as far as I am informed, to carry the stethoscope into the daily study of his cases. He returned from Philadelphia in 1838, having become an expert in this method of diagnosis, under the teachings of Gerhard and Pennock. I was then pursuing the same study in the wards of the Marine Hospital, and owe my first advances to the instruction of Dr. Bullitt. Dr. Bullitt brought with him, besides this practical knowledge, a mind thoroughly and ardently imbued with Louis's inductive method of studying disease. This method, substituting carefully-ascertained facts and the results inductively evolved from them for mere closet theories, was then bringing about a thorough revolution in the science of medicine. In this Dr. Bullitt played an efficient part by his pen and his teachings.

Dr. Harrison appreciated at an early day the importance of clinical medicine, and was among the first in the West to

give clinical lectures, in the wards of the Marine Hospital, to a class of students. The clinical advantages of Louisville caused him to look to that city as the future seat of a great medical school.

In 1834 Dr. Harrison removed to Philadelphia to find a more suitable theater for the realization of his ambitious purposes. He was called very soon, however, to fill an important chair in one of the schools of Cincinnati. While teaching here, and for many years before, his pen was prolific in the production of valuable papers on various medical subjects. As a teacher of materia medica he was distinguished for his sound and practical therapeutics. He was an able practitioner, and brought before his class the ripe fruits of his extensive experience. He published a "Treatise on Materia Medica and Therapeutics," the first and only systematic work on this subject by a western physician. The practical portions of this work are excellent, and worthy of all respect even at the present day. The book is remarkable as being probably the last ever published in this country in which the doctrines of pure solidism are asserted and those of humoralism opposed. The idea of the absorption of medicines by the blood-vessels is vehemently rebuked.

In 1838 Dr. Charles Caldwell delivered the first clinical lectures of the University of Louisville in the wards of the Marine Hospital. I was his clinical assistant. In 1839 the *first* clinical amphitheater ever founded in the West was attached to this Hospital. From that room, for more than thirty years, the practical lessons of Drake, Gross, Eve, J. B. Flint, Bartlett, Ethelbert Dudley, Annan, Austin Flint, Palmer, Hardin, Middleton Goldsmith, D. W. Yandell, and their associates and successors, have been diffused throughout the length and breadth of this country.

Dr. Samuel L. Metcalfe, who died in Philadelphia in 1856, had a scientific character of which Kentucky may well be proud. Though known to many of the older physicians, he

is possibly unknown to some of the junior members of the profession. In 1833 Dr. Metcalfe published, at New York, a treatise, entitled "A New Theory of Terrestrial Magnetism," containing speculations of a remarkable character, and contending for the identity, in certain relations, of heat, electricity, and magnetism. In it were the germs of the great philosophical theory called "the correlation of forces," now received by the scientific world. This book was reviewed by Dr. T. S. Bell, in the Louisville Journal, shortly after it was published, and pronounced the first work of its kind on the subject.

In 1838 this work was expanded into a noble treatise, entitled "Caloric: its mechanical, chemical, and vital Agencies in the Phenomena of Nature." Dr. Metcalfe took the manuscript to London and endeavored to find a publisher. One was at last found, who agreed to publish it provided the author would permit him to submit the manuscript to the inspection and approval of a scientific reader employed for such purposes. The manuscript was kept for some weeks, and after many calls Dr. Metcalfe succeeded in recovering it, with the information that the judgment of the reader was unfavorable. Prof. J. B. Flint was in London at the time, purchasing the library for the Medical Department of the University of Louisville, and to him Dr. Metcalfe communicated these facts; with the additional statement that he had ascertained, beyond a doubt, that Michael Faraday was the reader to whom his manuscript had been submitted. The doctrine of "the correlation of forces," which forms a conspicuous element of the fame of Faraday, was clearly and cogently taught in this new work of the Kentucky philosopher; and prior to the time that Dr. Metcalfe's manuscript was perused by him he had never taught any thing of the kind. In 1843 Dr. Metcalfe published his treatise in two large volumes. It was received in Europe with an unusual amount of favor. In 1853 a second edition was published.

a copy of which is owned by my distinguished friend, Dr. T. S. Bell.

Dr. Metcalfe resided near Simpsonville, Shelby County, while in Kentucky. The state, and especially the medical men, have abundant reason to cherish his well-earned fame. His reputation was so firmly established in Europe that he was importuned to become a candidate for the Gregorian Chair in the University of Edinburgh, which he declined.

In January, 1843, Dr. Wm. A. McDowell, a cousin of the great ovariotomist, and one of his aids in the performance of his operations, published an octavo volume, of two hundred and sixty-nine pages, entitled "A Demonstration of the Curability of Pulmonary Consumption in all of its Stages." Dr. McDowell removed to Louisville some years anterior to this date, with a name and prestige which soon won for him an excellent practice in all of the branches of medicine. Pulmonary consumption was one of his favorite subjects, and he soon put forth the claim of unusual success in the treatment of this disease. Such unusual results were announced as to excite in the minds of his professional friends an unjust suspicion of charlatanry. When his book appeared it was received not only with incredulity but with severe and sneering criticisms. Time, however, has done justice to Dr. McDowell's character and claims. The work, though defective in literary merit, crude in many of its ideas, and asserting powers for many medicines which they do not possess, contained not only the germ but the substance fully developed of the therapeutics of consumption now considered orthodox. He states that he first derived the views which he inculcates, modified by what he denominates the *antipodal* plan, from Dr. Joseph Parrish, of Philadelphia. To quote the language of his preface: "We concluded upon combining his theory with an antipodal plan which we ourselves had determined to adopt, consisting of a course of dietetics and regimen calculated to produce acquired gout; for we

regarded gout as the extreme athletic or tonic morbid condition, consumption as the extreme atonic." Though this mode of presenting the subject be crude and coarse when compared with our more refined and seemingly more recondite rationale of treatment, the same great analeptic truth underlies both. I have no doubt that Dr. McDowell cured many cases of genuine phthisis pulmonalis, and prolonged the lives of many more, as the tonic and restorative plan, now universally adopted, is well known to do. His book was in advance of the times in this country certainly, and I do not know that a formal presentation of the subject had then been made in Europe. Dr. J. Hughes Bennett, of Edinburgh, and other distinguished co-workers, were beginning to inculcate very strongly the same method of treatment, but had not given a published form to their views. This book of Dr. McDowell's has not secured the place in the literature of pulmonary consumption to which its intrinsic merit entitles it.

The Kentucky Institution for the Blind was incorporated in 1842. The movement for such a school in our state was inaugurated by Dr. S. G. Howe, of Massachusetts, who had so successfully begun the beneficent work in the latter state. Kentucky was among the first to follow the example of the "Old Bay State." From its foundation to the present time this institution has been an object of just pride. Much of its progressive success has been due to an eminent member of our profession. "To inaugurate a great charity is a noble work; but to watch over it, to foster it, to stand by it from the beginning, to be its firm friend through every disaster and its counselor in every emergency, to give it unwearied attention for over thirty years, and sacrifice to its good an incalculable amount of anxious thought and valuable time, is surely equally noble. Such services the state of Kentucky has received from Dr. Theodore S. Bell." This is the testimony of one who is familiar with the devotion of this remark-

able man to this institution. I can add my own testimony to the same effect. In my many professional drives in the direction of the Blind Asylum I rarely fail to meet Dr. Bell making his daily visit to his pet institution. By his efforts the Bible was stereotyped, and a copy given to every worthy pupil of the school. Kentucky enjoys the honor of being the first state in the world to make a provision by law of this kind.

The history of the Blind Asylum has a bright page for this constant friend. The history of Kentucky medicine for the last forty years will also devote to him a large and varied space. Ever busy, working more hours every day and sleeping fewer than any one I ever knew, there is scarcely a department of medicine upon which he has not left his impress. As a public hygienist, as a medical philosopher and journalist, as a controversial writer, as a practitioner and teacher, he has long occupied and now occupies a conspicuous position. Seemingly untouched by time, he is to-day as fresh and strong in physical and mental power as he ever was.

Kentucky was one of the first states of the West, probably the very first, to comprehend the incalculable value of a careful registration of the marriages, births, and deaths of her citizens. The importance of such registration, fully appreciated by many of the states of Europe and by a few in this country, was ably set forth in Kentucky, and impressed upon the public and legislative attention, with great force and effect by the first regular president of this Society, Dr. W. L. Sutton, of Georgetown. In effecting the passage of a very perfect law, by the legislature of 1851–2, he was ably re-enforced by Dr. W. S. Chipley, of Lexington, and Dr. T. S. Bell, of Louisville. It will not be deemed immodest in me to say that a "Lecture on Sanitary Reform," delivered by me to the medical class of the University of Louisville at the opening of the session of 1851–2, and published by the

class, had some influence, by the logic of its statistics, in determining the passage of the act. Dr. Sutton was the first registrar, and most successfully carried the law into execution. Before, however, even a partial realization of the great results anticipated by him, Dr. Sutton was removed by death from this sphere of public usefulness, and was succeeded by Dr. S. M. Bemiss, now of New Orleans. Dr. Bemiss proved to be a worthy follower of Dr. Sutton. He carried the work forward with zeal and ability, and his reports attracted much attention both at home and in foreign countries. The war of 1861 put an end to this as to all other civil pursuits, and since its close the law has not been revived. It is a reproach to the intelligence of the state, and most deeply damaging to her interests, that it has not been restored.

Dr. Sutton was one of the ablest men of the profession in Kentucky. Plain, modest, practical, an excellent observer, a good writer and a sound practitioner, the state has produced few superior to him. In sanitary science he was the foremost man among us. His brochure on Typhoid Fever, and a few other papers on medical subjects, gave him high rank in medicine proper.

In October, 1846, ether was first used by inhalation as an anæsthetic. In the winter or spring of 1847 Dr. Joshua B. Flint administered it for the first time in Kentucky, and possibly in the West, in an amputation of a lower limb performed by him in the presence of a number of professional friends. I was present. The ether was then called "letheon," and administered by the aid of a complicated inhaler.

Chloroform was first brought forward by Sir James Y. Simpson, as a substitute for ether, in November, 1847. It was used for the first time in midwifery in the city of Louisville, and as far as is known in the state of Kentucky, by Prof. Henry Miller, on the 20th of February, 1848.

Prof. S. D. Gross was the first surgeon in Louisville to use chloroform as an anæsthetic in surgery. He operated

upon a servant under its influence in the family of Thos. P. Smith, removing a large tumor.

Professor Miller was a pioneer in several other important branches of his specialty. In an able and very candid paper, denominated "Retrospect of Uterine Pathology and Therapeutics in the United States, especially in regard to intra-uterine medication in chronic internal metritis," published by Dr. Miller, in 1871, it is certainly established that he was the first in the West to use the speculum uteri systematically in the treatment of diseases of the os and cervix uteri. This was as early as 1835, a period when the speculum was almost unknown practically to the profession in any part of the United States. The first speculum was brought to Louisville by Dr. Allan P. Elston, a distinguished young physician, who after a residence in Europe for several years returned to Louisville and resumed his professional labors. Failing health compelled him to retire after a short but honorable career. Dr. Miller was present when Dr. Elston examined one of his patients in the Work-house Hospital, and becoming enamored of the speculum forthwith devoted himself to this interesting branch of surgery. It is needless for me to tell this audience with what distinguished results. For a time the treatment by the aid of the speculum was limited to the os and cervix uteri. In 1843 Dr. Miller extended this local treatment still deeper, and made applications to the cavity of the organ. In the paper above mentioned he proves conclusively that he was in advance of every one else in the United States in intra-uterine medication. Kentucky justly claims priority in both forms of uterine therapeutics.

Dr. Miller is the author of the first systematic work upon midwifery ever published in the West, a work which ranks in original thought and practical value among the best ever published.

Kentucky has been ever prompt to obey the requirements of philanthropy. Under the wise counsels and benevolent

influence of Robert W. Scott, the legislature, in 1860, founded the Kentucky Institution for the Education of Feeble-minded Children and Idiots. This is the only institution of the kind south of the Ohio River. There are several in the North, which have undoubtedly achieved surprising results in elevating the mental status of these unfortunate beings. They who have not observed the amount of mental improvement which may be effected by systematic training, in subjects who seem to be hopelessly feeble, would scarcely credit the real results. Our own institution promises to be a benefaction worthy of generous encouragement.

The Louisville College of Pharmacy was established in August, 1870. It has organized a school of pharmacy, with efficient professors, to teach the theory and practice of pharmacy, materia medica, chemistry, and the collateral sciences. Such an institution has long been needed in Kentucky, and there now exists no reason why every apothecary should not be a graduate of this or some other equally worthy college, and his qualifications fully ascertained, before he is permitted to dispense medicine. The interests of the public, no less than of the profession, demand the enactment of such a law.

On the 28th of March, 1872, the legislature of Kentucky passed an act incorporating the "Central Kentucky Inebriate Asylum." This asylum is intended for the medical treatment, control, and restoration of the inebriate. It is invested with the power to receive and retain all inebriates who enter it, either voluntarily or by the order of the committee of any habitual drunkard. The committee of the person may keep him in the asylum at discretion. This act does not indicate by what power this committee is created. Some previous law must exist; and I presume that an act, approved March 18, 1872, to provide for the preservation of the estates and security of persons of unsound mind, who by habitual or excessive use of poisonous drugs have become incompetent to manage themselves or estates with prudence and discretion,

supplies the defect or provides for it. This act empowers the circuit or chancery court of the county to appoint a committee of one or more persons to take charge of any person who by the habitual or excessive use of opium or hasheesh, or any other drug, has become incompetent to manage himself or estate. The fact of such incompetency must be brought before the court by affidavit of two or more respectable persons, and an inquest must be held by a jury in open court to inquire into the fact. The committee of custody and control is invested with the power to confine such person in any private asylum or in one of the lunatic asylums of this commonwealth. It will be observed that this act specifies opium, hasheesh, or any poisonous drug, but does not mention by name *alcohol* and its preparations. A fair and scientific construction would include these; yet a doubt is left, and difficulty might spring up if any one chose to contest the point and insist upon a literal interpretation of the law. Habitual and inveterate drunkenness is certainly one of the forms of insanity. It is a condition in which the will is under the mastery of the passions. It is recognized by the best authorities as insanity, and has received the names of dipsomania and oinomania. The interests of the individual and of the entire community would be advantageously consulted if this view of drunkenness were carried into practical effect, and the drunkard made amenable to the law which is applied to the ordinary lunatic. Whether the asylum just incorporated be one merely for voluntary confinement or one to which a jury may send any proper subject, Kentucky has led the advance, as far as I am informed, in this direction, in the valley of the Mississippi.

It is a creditable fact, reflecting the estimate in which Kentucky medicine is held by the profession of the United States, that our state has directly furnished two presidents of the American Medical Association, in the persons of Drs. Henry Miller and David W. Yandell, and indirectly a third,

in the person of Dr. S. D. Gross, all members of this Society. No member of the profession in this country has received more honors at home and more foreign decorations than Dr. J. Lawrence Smith, another member of this Society.

The establishment of a new school in 1837, and of several others at later dates, led to important results in the history of Kentucky medicine. These schools have been the means of developing and bringing into more conspicuous position many of our own most gifted physicians, and have invited from other places some of the most eminent physicians of the United States. Among the former may be mentioned Bush, Peter, Ethelbert Dudley, Miller, Powell, Hardin, Richardson, Bullitt, the Yandells, Foree, Breckinridge, Cummins, Bell, Bemiss, Bayless, Bodine. Among the latter, Bartlett, Silliman, J. B. Flint, Drake, Cobb, Colescott, Austin Flint, sr., Eve, Gross, Palmer, J. Lawrence Smith, Middleton Goldsmith. Some of the best contributions to American medicine and surgery were made by several of these gentlemen while they were connected with the schools of Kentucky, and these may be fairly considered as belonging to the medical literature of our state. If all of the works were not written here, much of the matter which gives them interest was obtained while their authors were connected with the schools and hospitals of Louisville. This is particularly true of the works of Gross, Drake, and Austin Flint.

Connected with the schools of medicine which have existed in Kentucky many reminiscences of men and things arise in my mind. Among the most pleasant of these is my recollection of Dr. Wm. H. Richardson, so long the professor of obstetrics in Transylvania. Few men ever had nobler traits of character. He was warm-hearted, brave, and a sincere friend. I knew him from my earliest boyhood, and have passed many happy and instructive hours at his magnificent home in Fayette County. His hospitality was profuse and elegant. I listened to his public teachings as a professor

with interest and care, because I knew that he taught the truth as far as he possessed it. He was not scholarly nor graceful and fluent as a lecturer; but he was ardent and impressive, sufficiently learned in his special branch, and had at his ready command a large stock of ripe personal experience. I honor his memory beyond that of most men whom I have known.

I have often recalled with wonder the supreme satisfaction with which I looked upon the whole science and art of medicine, after listening to one course of lectures by Dr. John Esten Cooke, for so many years the venerable incumbent of the Chair of Practice in Transylvania, and in the University of Louisville. Few teachers ever held such sway over the minds of intelligent professional men as Dr. Cooke over the entire medical mind of the valley of the Mississippi. Every one entertained profound respect for his great intellect and general learning, for his purity of character and honesty of purpose. His theory of medicine was peculiar to himself, and elaborated with great care. It seemed to be built upon an impregnable logic. It was dogmatically taught, and carried captive the minds of the hundreds of young men who listened to his positive enunciations. There were no graces of oratory about him, yet he had a subtile way of infusing the poison of his false doctrines which could not be resisted. These doctrines were of singular simplicity and universal adaptedness. The practice growing out of them, so long dominant in the South and West, was equally simple and adaptable. Three familiar medicines constituted the trinity of his practical creed. Quinia and opium were not known in his materia medica. With the retirement of Dr. Cooke, in 1844, a new medical era commenced in the wide region over which his teachings so long prevailed; and now not a vestige of either his theory or practice remains, except in the pages of his book and in the minds of a few of the ancient members of the profession.

Who that ever saw Dr. Charles Caldwell can fail to have a living remembrance of him? Who that ever listened to him as a teacher can fail to recall with admiration the great intellect, the varied scholarship, the beauty and power of pen, the polished eloquence of the grand old man? He impressed every one by the stateliness of his personal appearance. He looked a very monarch, as, with scepter waving in his hand, he moved majestically along.

Dr. Caldwell was largely instrumental in carrying the Medical Department of Transylvania to its high point of prosperity. He was one of the great levers by which the School of Louisville was elevated to a still loftier position. By reason of certain attractive qualities, and peculiar powers foreign to pure medical teaching, he was eminently successful as an architect of medical schools. Despite these facts, the truth of history compels the averment that he was never a teacher of true *practical* medicine, nor of that kind of medical philosophy which forms the useful medical mind. In these regards he has not left an enduring record in the annals of Kentucky medicine.

While Dr. Caldwell was yet holding a conspicuous place as a medical teacher a revolution was going on in the whole science of medicine. Old medicine was expiring and new medicine taking its place. Before the pressure of professional opinion created by this revolution, Dr. Caldwell, like his old colleague, Dr. Cooke, retired from professorial life in 1849.

When the trustees of the Louisville Medical Institute were organizing the first faculty, in 1837, Dr. Caldwell, the chief artificer of the enterprise, was furnished with *carte blanche*, and sent on a mission to find a professor of surgery. A careful search eventuated in the selection of Dr. Joshua B. Flint, of Boston, Mass. Dr. Flint was a graduate of the Academic and Medical Department of Harvard. He was indorsed to Dr. Caldwell, by the best men of Boston, as a

mature and thorough general and medical scholar, as a conservative, skillful surgeon, and as an acceptable teacher. He was tendered the chair of surgery in the institute, accepted it, and sundering his many ties in Boston came to Louisville and united his fortunes with our school and our people. The impression which he made upon the profession in Louisville was favorable in the highest degree. He disclosed qualities which at once commanded confidence and respect. He was quiet and modest, avoiding rather than courting conspicuous notice. His fine scholarship, literary and professional, made itself evident to all appreciative observers. He was not ostentatious in this regard. His sound judgment as a practitioner of surgery, and his rare dexterity and coolness as an operator, were readily recognized. In the field of operative surgery he was distinguished, beyond all other men of his time, for his conservatism. Many limbs and parts were saved by him which would have been lost by less considerate surgeons. He did not desire the *eclat* which great surgical feats elicit.

As a teacher, Dr. Flint came forward at a time when medicine and medical teaching were in a transition stage; when mere theories were giving place to facts, and things were taught and not mere speculations. His style was quiet, eminently and purely didactic. He was not a declaimer, had no *ad captandum* arts, said nothing for effect merely or to elicit applause. His lectures derived their ornament from correct rhetoric and classical illustrations. They were never soiled by coarse anecdote or indelicate allusions. He was a dignified teacher of the facts and truths of a serious science. He did not seek popularity with his classes. He hoped to win their confidence and approval by giving them sound instruction. Possibly he made the distance too great between the master and the pupil. This had not been the usage in this wild western country. It was so in the place of his education, and in the foreign schools. He was known to favor the use of the professorial cap and gown.

As a candidate for business before the public, he stood, coldly, upon his demeanor as a gentleman and his real merits as a practitioner. He had no arts about him to win popularity. He rather repelled than attracted people. He was punctiliously careful in his intercourse with the patients of other physicians. In this relation he was, as Charles Lamb said of his father, "a man of losing honesty." Socially no man was more charming. Though dry and not much of a talker generally, on festive occasions his conversation was brilliant and his wit sparkling. At a dinner or evening party, among cultivated people, he was delightful.

I must mention one other quality in Dr. Flint. To his sick brethren he was constant in his attentions, aiding them by his wise counsel and cheering them by his hopeful words. Dr. Flint retired from the institute at the close of his third course of lectures, but was reinstated in the same chair after the lapse of a few years.

Dr. Daniel Drake, though claiming Cincinnati as his home, was really a Kentucky physician, having passed the most active years of his life in our state, and achieved his great fame as a teacher and writer while connected with our schools. It is unnecessary to detail his brilliant medical history. It is known to every one. I wish to mention the single honorable fact that he was the *first* physician of the West ever called to fill an important chair in an eastern medical school. In 1830 he was appointed professor of theory and practice of medicine in the Jefferson Medical College, of Philadelphia. Dr. S. D. Gross was appointed to the chair of surgery in the same school at a later day, and, as far as I now remember, was the second western man thus distinguished.

As the intimate personal friend and fellow-student of Dr. Jas. M. Bush, I had the opportunity to learn, at an early day, the genius as an artist, the quick perceptive faculties and the logical qualities of mind which form the basis of his high professional reputation. He was a student first in the office

of Dr. Alban Goldsmith, and then in that of Dr. B. W. Dudley. He won the high regard of both of these eminent men. As soon as he graduated in medicine he became prosector for Dr. Dudley, and then his associate in the practice of surgery. When Dr. Dudley retired from teaching, Dr. Bush was appointed to the vacant chair, and discharged its duties with eminent ability. When Dr. Dudley retired from the field of his brilliant achievements as a surgeon, Dr. Bush had the rare courage to take possession of it. No higher tribute can be paid to him than to say that he has since held possession without a successful rival.

In the sciences collateral to medicine Kentucky has played a distinguished part. In the interesting departments of botany, geology, and chemistry, Dr. Charles Wilkins Short and Dr. Robert Peter are known throughout the scientific world. As teachers, the modest, almost shrinking manner, the seemingly acerb dignity, and the Addisonian style of the one, and the lucid expositions and brilliant illustrations of the other, must be remembered by all who ever listened to them.

I can not close these hasty and imperfect reminiscences, so unworthy of their subjects, without the mention of one with whom I had the honor to be upon terms of personal and professional intimacy for more than thirty years. I refer to Dr. Llewellyn Powell. Dr. Powell held the chair of obstetrics, first in the Kentucky School of Medicine, for some years, and afterward in the University of Louisville. In both he was recognized as an able, eloquent, and instructive teacher. He gave unqualified satisfaction to colleagues and pupils.

There are two classes of medical teachers: the one professional, trained in the arts of elocution and happy illustration, studiously skilled in the many ways of putting things; not subordinating matter to manner wholly, but relying largely upon felicitous modes of presenting their subjects. The other class includes physicians of mature study and observation, who have accumulated a large stock of practical knowledge

from which to draw the matter of their teaching. Out of the fullness of their knowledge they are teachers. The graces of rhetoric and the tricks of elocution are not conspicuous elements of their style. Dr. Powell happily blended the best qualities of both of these classes. By nature he was wonderfully endowed with the gift of language. Words the most appropriate were uttered promptly and gracefully at the bidding of every thought. Though he was not trained to the special work of teaching, he seemed to possess the happy facility of the professional teacher. With such a manner he was prepared to impress upon his pupils with singular effect the practical knowledge derived from many years of clinical observation.

Dr. Robert J. Breckinridge was reared and educated in Louisville. Of a distinguished family and singularly pleasing address, graceful and easy as a speaker, as a writer forcible, pointed, and scholarly, he would but for his untimely death have plucked the highest honors in the profession.

Dr. Carey H. Fry, an original member of this Society, died, on the 5th of March, in the city of San Francisco. He was present and took an active part in our memorable meeting of 1852. He was with us again, in Louisville, in 1872, with undiminished interest in our proceedings. Truth warrants and personal affection impels me to say that he was the peer of the highest in all noble qualities of character. He was a refined gentleman, an accomplished physician, and a gallant soldier.

Whatever of renown the University of Louisville may have acquired, a portion of it is due to two distinguished members of another profession, the Hon. John Rowan and the Hon. James Guthrie. Judge Rowan was the first president of the board of trustees, and gave the influence of his national name to the foundation and early fortunes of the school. Mr. Guthrie became the president upon the death of Judge Rowan, and continued so until the close of his long and

useful life. No institution ever had a more devoted friend. His fealty to it never faltered. Amid the cares of state and a large professional business, he always found time to work for the interests of the University. Whatever seemed likely to promote these interests met with his warm approval; whatever opposed them was sure to meet his stern and inflexible hostility. His name is indissolubly linked with an interesting part of the history of Kentucky medicine.

The medical journalism of Kentucky has always been of a high order. Though commenced at a later date than that of her sister state of Ohio, Kentucky was in advance of all other states of the valley. The Transylvania Journal of Medicine and the Associate Sciences was the first journal published in Kentucky. It dates from 1828, and continued to be the leading journal until its close, in 1838. Its successive editors were Professors John Esten Cooke, Charles Wilkins Short, Lunsford P. Yandell, and Robert Peter. The next was the Louisville Journal of Medicine, in 1838, edited by Professors Henry Miller, L. P. Yandell, and Dr. T. S. Bell. This had a brief existence. Then came the Western Journal of Medicine and Surgery, edited at first by Profs. Drake and Yandell, and then by Professor Yandell and Dr. T. S. Bell. It lived from 1840 to 1855. The Western and Southern Medical Recorder was published by Dr. James Conquest Cross, in Lexington, in 1841–2. The Kentucky Medical Recorder, a continuation of the Transylvania Journal, was edited by Profs. Henry M. Bullitt and Robert J. Breckinridge, in 1851–2, in Louisville. Dr. L. J. Frazee edited a semi-monthly journal, called the Louisville Medical Gazette, in 1859. Drs. Bemiss and Benson published the Louisville Medical News, in 1859–60. The Louisville Review, edited by Gross and Richardson, in 1856, and the Louisville Medical Journal, by Dr. Colescott, in 1860, were short-lived. The Sanitary Reporter was published, semi-monthly, by the United States Sanitary Commission, in Louisville, in 1863–4.

A distingnished editor of the first journal of Kentucky still survives, in the full vigor of his intellectual powers, and is yet a large contributor of his mature learning and experience to the journalistic literature of the state. A brilliant and instructive teacher, first in Transylvania and then in the University of Louisville, no member of the profession in the West has written more gracefully and powerfully than Dr. Lunsford P. Yandell. No Kentucky author has written more or upon a greater variety of important topics. His scientific reviews, elaborate monographs upon various subjects of medicine, papers upon geology and other branches of natural history, his introductory and valedictory addresses, and contributions to general and popular literature exceed one hundred in number. Besides these, I can not omit to mention a most valuable unpublished report made to this Society, in 1853, upon the Medical Literature of Kentucky. It is a work of exhaustive research, and an accurate index to the papers of all the writers of Kentucky. It should be continued to the present time, and published by this Society.

The two journals which now represent this branch of medicine in Kentucky, the American Practitioner and the Richmond and Louisville Medical Journal, rank among the ablest of this country.

In a community which has founded and fostered so many great medical institutions, true science would necessarily always command respect and confidence. In no part of this country have the many forms of quackery met with so little encouragement. Every where, of course, will be found ignorance, credulity, and the other weak elements upon which medical fungi grow; but Kentucky may be justly proud of her remarkable exemption from them.

Time and your exhausted patience admonish me that I must bring this historical *olla podrida* to a close. I trust that what I have said may serve to add something to the good name of our beloved state, and stimulate us to contribute

yet more to the renown which our illustrious fathers have achieved for it.

I wish to say a few words as to the work of our present meeting. We have come, many of us, a long distance to do this work. Let us do it thoroughly and well. Let our sessions be devoted to scientific business, undisturbed, as far as possible, by matters which can not advance the interests of our beneficent calling, and may mar the usefulness and happiness of our annual reunion. I have a hope that this meeting may be signalized by the dignity of its conduct and the number and value of its contributions to medical science.

CLINICAL CONTRIBUTION TO DISEASES OF WOMEN.

BY THEOPHILUS PARVIN, M. D.

Case I. Extra-uterine Fibrous Polypus.

Six years ago Mrs. G., forty-two years old, consulted me for leucorrhœa and menorrhagia, from which she had been suffering for nearly three years. She had taken various internal remedies and used astringent injections, but with no benefit. No examination with either finger or speculum had been made. Upon introducing the finger I found just without the os uteri a tumor about the size of a walnut, and having a short pedicle about the thickness of the little finger. It was very easy to encircle the pedicle with the wire rope of Braxton Hicks's ecraseur, and then a few turns of the screw severed the growth, which upon section seems composed of fibrous tissue. No hemorrhage followed, and the patient was at once cured of her leucorrhœa and of her menorrhagia with the removal of their cause.

Case II. Mucous Polypus.

Mrs. D., about twenty-seven years of age, had an abortion two years ago, since which time her menstruation has been scanty and she has had leucorrhœa. She would not now consult a physician—

the disorders are such slight inconvenience—were she not desirous of having children. By digital examination the mouth of the uterus is found somewhat greater in diameter than it should be, and is partially occupied by a soft, pulpy body, which retreats before the finger into the cervical canal. Resorting to the speculum, there is brought in view a bright-red body, nearly the size of a cherry, half peeping out from the lips of the womb. It springs from the anterior wall of the cervical canal, a short distance from the os.

By Sir William Wilde's polypus snare the growth was quickly removed; then nitrate of silver in substance was applied to the surface from which it grew. The leucorrhœa was cured, but there was no material change in menstruation.

Case III. Intra-uterine Fibrous Polypus.

Mrs. S., forty years of age, a widow for several years, suffers from metrorrhagia. She has become emaciated and pale; has to be in bed three fourths of the time. The cause of her suffering has been correctly diagnosed as an intra-uterine tumor, and unsuccessful efforts have been made to remove it—efforts which were too early desisted from in consequence of the severe hemorrhage they caused. The tumor is about three inches in length and rather less in diameter, seems quite solid, and is attached to the fundus. After dilating the os with sponge-tents, and then with one of Barnes's dilators, smallest size, I endeavored to get a wire-rope around the pedicle, but after some time thus vainly spent relinquished the attempt. Then with Museux's forceps I seized the lowest portion of the tumor, dragging it down as far as possible, and cut off with scissors all that could be thus reached. Again seizing the remaining portion of the growth, another portion was similarly removed. There remained less than a third still attached by the pedicle. Again seizing it with the forceps, I twisted the mass so as to tear the pedicle, and the operation was completed. No hemorrhage ensued, and the patient's recovery was complete.

Case IV. Placental (?) Polypus.

Mrs. M., thirty-eight years of age, more than a year before consulting me, had an abortion at ten weeks, and since then has suffered from menorrhagia and leucorrhœa, both of which being very profuse. Her menstrual flow is usually regular in time of

occurrence, but prolonged and profuse. While unwell she does not have any thing analogous to labor-pains, unless when clots are discharged. The uterine cavity measures four inches, but with the sound I fail to detect any foreign body. The uterus seems much larger and softer than it should be. Indeed I regarded it for some months as an example of that condition so well described first by Duparcque, and termed by him *engorgement mou;* and thus regarding it endeavored, by the internal administration of strychnia or of ergot during the intermenstrual periods, and quinine in large doses during menstruation, and by various intra-uterine applications—chiefly, however, Churchill's tincture of iodine—to cure the patient. But all these means proved merely palliative. One day visiting her while menstruating—called in consequence of the flow being more painful and even more profuse than usual—upon a digital examination I discovered, to my great surprise and joy, an intra-uterine growth, attached to the fundus, larger than a pullet's egg, more dense than a mucous polypus and yet not so hard as a fibrous, and withal not of uniform consistence. Three days after the flow ceased the growth was readily grasped by means of a fenestrated polypus forceps, and the pedicle twisted off.

Case V. Very large Extra-uterine Fibrous Polypus.

Three years ago, at Louisville, Ky., Mrs. —, the wife of a physician in one of the southern states, came under the professional care of Dr. Preston B. Scott and myself. She had been suffering for some time with metrorrhagia and leucorrhœa, and was pale and exhausted. The cause of her suffering was a tumor so completely filling the vagina that it was impossible to reach the uterus by the finger. What was the character of this tumor?* It was believed by the lady's husband—very intelligent, and with considerable professional experience—to be a fibrous polypus of the uterus. In this opinion both Dr. Scott and myself coincided; but one gentleman suggested that it was an inverted uterus. The recorded instances where the one has been mistaken for the other are sufficiently numerous to demand the most painstaking investigation where there is the least possibility of mistake. Let us consider for a moment the *differential diagnosis* as applied to this case.

*Several medical gentlemen saw the case with Dr. Scott and myself; and to their advice and courtesies, and to their assistance in the final removal of the growth, we both cheerfully acknowledge our indebtedness.

Inversion of the uterus usually occurs at or soon after parturition, but this lady's symptoms dated some months subsequent to her last confinement. Inversion is usually sudden in its invasion, and the first symptoms are more severe than those that occur later. In this case the history was the reverse of this. At menstruation an inverted uterus will exhibit the flow oozing from the exposed surface. Nothing of this kind was observed in the case in hand. The *sensation* communicated to the finger in examining an inverted uterus is very different from that observed in examining this. In the former it is that of pressing a body of uniform consistence, while moderate pressure of the tumor revealed an external portion much less dense and resistant than that felt by firm pressure. The *shape* of an inverted uterus* is conical, the base of the cone being below; but this tumor was a spheroid. The *size* of the tumor was greater than was consistent with inversion. The *sensibility* of an inverted uterus is not lost; a fibroid has none to lose. But a conclusive test was that we succeeded after many trials in passing a sound into the uterus. The detection of the uterine fundus in the hypogastric region destroyed all possibility of error.

After the patient's health had been improved by the administration of tonics, the tumor was removed; its removal presenting three difficulties: first, the encircling the pedicle with the wire-rope of the ecraseur; second, the breaking of the rope before the pedicle was completely divided, thus requiring a new rope to be applied; and third, the extraction of the tumor after the division of its attachment was almost equal in difficulty to the delivery of the fetal head with no *vis a tergo* to assist. The hemorrhage was considerable, but at no time dangerous. A few days later the swollen and ragged capsule of the tumor was readily removed by simply tearing it away.

This lady's recovery was complete, and she has since given birth to a healthy child. Her patience and heroism during the protracted and painful operation for the removal of the tumor were remarkable.

Remarks. Polypus was first used by Moschion to designate certain uterine growths. Literally it means having *many feet;* but in its common acceptation it is a growth having one foot, or pedicle, by which it is attached to the surface from which

* Of course in all these remarks reference is had to *chronic* inversion of the uterus.

it sprung and through which it is nourished, a true parasite. This pedicle, which is really only a constricted portion of the growth itself, probably contains all the anatomical elements of the tumor. A physiological definition would lead us to see in a uterine polypus a localized hypertrophy of one or more of the structural elements of the uterus. From this definition we readily derive the classification of these growths into *mucous* and *fibrous*, the more common varieties; *vesicular*, which is rare; and *vascular*, still rarer; and finally *mixed*, which are usually a combination of the first two. Placental polypi—which would not be included in the physiological definition—are disputed by most authorities; but really a *fleshy mole*, as it is termed, meets the common definition of a polypus both as to *form* and *connection*, presents many common symptoms, and is amenable to the same treatment.

The chief *symptoms* of uterine polypi are usually regarded as menorrhagia first, then metrorrhagia,* leucorrhœa, or watery discharges, and pain; yet these, as every one knows, are not pathognomonic, while one or more may be entirely absent. Dr. Gooch says:† "I have seen a polypus about the size of a filbert growing by a narrow stalk in the uterus of a woman who had died of some other disease, and who during life had experienced no symptoms of it."

On the other hand, the amount of hemorrhage is an unfaithful guide in determining the size of the growth. It may be slight even when this is large; and, on the other hand, very great when the tumor occasioning it is small. Boivin‡ and Duges narrate a case where the hemorrhage was fatal, though the tumor was but the size of the first phalanx of the thumb; and Dr. Churchill remarks:§ "There is as

*"Rapidly recurring hemorrhages so commonly attend the presence of uterine polypus that they may be regarded as one of the most distinctive symptoms." (Wright on Uterine Disorders. London, 1867.)

†Diseases of Women and Children. Sydenham Society's edition, 1859.

‡ *Traité Pratique des Maladies de l'Uterus.* Paris, 1833. Vol. I., page 367.

§ Diseases of Women. Dublin, 1864.

much hemorrhage in many cases where the polypus is not larger than a filbert as where it is the size of a pear. Indeed it would appear that there is sometimes less hemorrhage with large polypi than with smaller ones."

It will be observed that in one of the cases which I have narrated, so far from there being any hemorrhage, there was an actual diminution in the menstrual flow.

"Pain in the back and loins" is given by Dr. Thomas, in his admirable treatise on diseases of women, as one of the characteristic symptoms; but this is so common in various other forms of uterine disease that no very great value can be attached to it. A more characteristic symptom observed in some cases of intra-uterine polypus is the occurrence of *pains*—pains analogous to labor-pains—this occurrence happening, if at all, oftener at a period than in an interval.

Even the pain, like the hemorrhage, is an uncertain criterion by which to judge the size of the growth. Courty* says that "polypi often become enormous without causing serious accidents, while I have seen one the size of a pea produce uterine pain and hysteric phenomena resisting the most judicious treatment, but entirely cured by the removal of the growth." So far as watery and leucorrheal discharges occur in uterine polypi, the latter are much more frequent than the former—at least so far as my own observation is concerned. But suppose we have all the symptoms previously mentioned present in a given case, how are we to arrive at a *certain* diagnosis? Of course, if the tumor has escaped from the uterus, or even partially escaped, it is a comparatively easy matter in the vast majority of cases to know with absolute certainty, from information given by the finger, the presence of a polypus. Where the tumor is very large, filling up the pelvic cavity so that the uterus is inaccessible, the means of diagnosis have been sufficiently considered in the narration of Case V.

But let the tumor be entirely intra-uterine, what then?

* *Traité Pratique des Maladies de l'Uterus.* Second edition. Paris, 1872.

Possibly an adept with the uterine sound may thus detect even a small growth. Certainly even one who is not peculiarly adroit will ascertain by this means that the uterine cavity has been increased. After all, the direct touch with the finger, the *immediate* exploration, is ever so much more satisfactory than the indirect method through the medium of the sound or probe. In many of these cases, more especially if the patient has had one or more children, the index-finger can be introduced into the uterus during hemorrhage or the menstrual flow, when the attempt would be vain in the absence of one or the other. This truth is familiar to most, nevertheless it is a golden one that will never wear out in frequent circulation. But failing in this we have still precious means in sea-tangle or sponge-tents, which will readily make room enough for the entrance of the finger.

In the fourth case narrated doubtless a correct diagnosis could have been made many months sooner if means had been taken to dilate the cervical canal, and thus the patient been saved much suffering. Yet having more than once had an alarming peritonitis result from the use of *tents*, I confess to something of a healthy horror at hastily resorting to these means. It is remarkable how little a matter has sometimes kindled a fire in which the life of a patient has been consumed! Dr. Leteinturier, in an interesting monograph,* narrates cases where what seemed but trivial operations upon the neck of the womb were quickly followed by fatal peritonitis. In one instance even death thus ensued from so slight a cause as a thorough digital examination. The explanation which he offers is, through *reflex action* the irritation of the uterine neck determines contraction of the broad ligaments, with consequent blood-stasis, engorging the internal genital organs, and ovary or broad ligament become the starting-point of an inflammation involving the peritoneum.

Considering the suddenness with which the symptoms

**Du Danger des Operations Pratiquées sur le Col de l'Uterus.* Paris, 1872.

of inflammation of the peritoneum may show themselves in some of these cases, this explanation seems more rational than that which would attribute it to an extension of congestion from the neck to the broad ligaments, oviducts, and ovaries, since this latter would require more time—would be gradual in its progress. But, returning from this digression, I was wrong in not using tents in the case referred to, and for the reason indicated. A physician's mistakes will frequently teach him his most valuable lessons.

Once a digital exploration of the interior of the uterus is effected, the detection of the polypus should be followed by an examination of its size, character, point of attachment, and thickness of pedicle.

Two other topics claim consideration. Conceding at once that a uterine polypus should be removed, *when* and *how* is this operation best done?

In answer to the first question, it may be said that as to the smaller growths, especially if quite without the uterus, it is comparatively indifferent at what time in the interval of menstruation they are operated upon. But, furthermore, if the growth be intra-uterine, and accessible without cervical dilatation by tents, a day or two after the menstrual flow the os will be more open and the uterus more relaxed, and thus the operation will be facilitated. However, in any cases where tents are necessary, or where other violent means must be resorted to, it is best to wait for that period of most complete repose to the sexual organs; that is, about the middle of the menstrual interval.

Velpeau justly speaks of "the treatment of polypus as one of the noblest triumphs of surgery;" and Gooch has said "the cure of polypus of the uterus affords one of the most striking instances of the triumph of our art." Yet the favorite method of neither of these eminent minds would find general favor at the present day. Gooch, for example, never used any thing but a ligature, condemning the method pursued at that

time in Paris—the knife—as neither so safe nor so successful; while our own great countryman, Dr. Sims, has declared* "the removal of a polypus by ligation is really a dangerous operation, resulting not unfrequently in pyæmia and death," warmly eulogizing the ecraseur. Dupuytren, operating upon two hundred cases by excisions, had severe hemorrhage but twice.

The general principle in the removal of uterine polypi is to attack the neck rather than the body, the pedicle rather than the tumor. Hence the use of caustics, once held in some esteem, is to be rejected; of course not including in this rejection the application of certain caustics to the surface from which the polypus grew, which in some of the varieties of the disease may be useful in preventing a reproduction or hemorrhage; nor will the rejection include the use of the galvano-caustic noose for dividing the pedicle.

Laying aside then ligatures† and caustics, the methods of removal may be briefly summed up as *torsion*, *tearing*, *crushing*,‡ and *excision;* which may be by knife, scissors, a single wire, or by the galvano-caustic. *Bruising* or crushing the polypus by means of suitable forceps, so that the vitality of the growth is destroyed, might be mentioned; but the same objections hold to it as to deligation, neither of which would be an operation of choice, but of necessity. *Tearing* may be resorted to when the polypus is small, especially when its attachment is to the neck of the womb. It is the familiar process of removing nasal polypi. *Torsion* may be used for larger polypi; even those the size of a hen's egg can be thus

* Uterine Surgery.

† McClintock (Clinical Memoirs on Diseases of Women, Dublin, 1863) states that in ten cases operated on by *deligation* there were three deaths; and these were the only deaths in a total of thirty-four cases of uterine polypus which he has reported. A method in which the ligature is sometimes used with advantage is, when severe hemorrhage is apprehended, to cut off, a few hours after its application to a large tumor, the part below the ligature.

‡ The reference is to crushing the pedicle, and thus dividing it.

removed, often too when intra-uterine. It is usual to add the caution that this method, as well as the one immediately preceding, is inapplicable when the pedicle is short and thick, thus extending into the uterine tissue. We may *crush* the pedicle by an ecraseur. This instrument, originally invented by Chassaignac, has been modified by Braxton Hicks—the substitution of a wire-rope for the chain—and by Dr. Sims* fitting it for intra-uterine use.

The *linear ecraseur* of Dr. Nott, which will be found described in the American Journal of the Medical Sciences, April, 1872, is an excellent instrument when the tumor is quite outside of the uterus, and there is sufficient room for seizing the pedicle in its crushing grasp.

When the tumor is quite within the uterus, and so large that removal with an ecraseur seems the only safe operation, we will probably choose between the instrument of Dr. Hicks and that of Dr. Sims. In some instances the inaccessibility of the pedicle or the very great size of the tumor may compel us to attack the growth in detail, and remove it by piece-meal. May not serious hemorrhage be apprehended? I think not. After getting fairly and *freely* through the capsule of one of these growths, even when very large, the flow of blood is comparatively little.

In the last volume of The Transactions of the Edinburgh Obstetrical Society, Edinburgh, 1872, Dr. J. Matthews Duncan narrates a case of uterine fibrous polypus, the tumor weighing two pounds six and a half ounces, in which he was compelled to reduce its size in order to effect its removal. He remarks:

* Dr. Atthill (Clinical Lectures on Diseases of Women), while commending the great ingenuity of Dr. Sims's instrument, says that it is very complex, and that "in practice it has proved a failure;" the latter part of which opinion he would hardly have uttered had he seen the instrument used by Dr. Sims or by Dr. Emmet. Dr. Atthill, *op. cit.*, recommends as a substitute for the wire-rope of Dr. Hicks—which, it must be acknowledged, sometimes breaks just when it ought not to—"a strong steel wire, such as is used for piano-strings." I have been utterly disappointed in finding any such wire flexible enough for the proposed use.

"The whole difficulty of this operation lay in the great bulk of the tumor, or, what amounts to the same, in the smallness and indilatability of the orifice through which it had to be brought. We tried to pull it over the perinæum, but failed. Had we succeeded it would have been effected only with great laceration of the parts. To reduce the bulk of the tumor then was essential. Several plans for doing this have been proposed. Dr. Simon, of Rostock, has practiced a method which he calls 'operative elongation,' and which consists essentially in making, by scissors, deep incisions, cutting through the capsule transversely at various parts. When this is done the tumor elongates under traction, and its removal can be managed. But the plan proposed by Dr. Alfred Hegar, of Darmstadt, seems to me to be more simple and efficient. It consists in cutting the tumor spirally, so as to make it somewhat resemble the child's toy which consists of a piece of ivory cut spirally, so that it can be drawn out to a great length."

The operator, after the removal of a large fibrous polypus, whether it be intra-vaginal or intra-uterine, may find an irregular, ragged mass presenting in the vagina, and attached within the uterus, which for the moment he may think an entirely different growth, since he finds the removed tumor perfectly smooth and complete, and the point of insertion of the pedicle plainly marked. This mistake I once made. Such irregular and ragged mass thus met with is the torn and swollen capsule of the polypus.

A word or two as to the immediate division of the pedicle. When the polypus is small, and at or near the os uteri, one of the neatest and quickest means is to use Sir Wm. Wilde's polypus snare. It takes but a minute to do the operation, and cutting with a wire may be less terrifying to a timid patient than with knife or scissors. The galvano-caustic noose will answer well enough with a pedicle readily encircled outside of the uterus, but it can not come into very common

use. Very few physicians in general practice will be provided with the necessary apparatus, and at any rate they will prefer more convenient methods of operating.

Direct "*excision*" with knife or scissors is, as Courty observes, "at once the best and most generally applicable method." Besides these instruments, to which various shapes have been given to better adapt them for dividing the pedicle, special instruments termed *polyptomes* have been devised; but really a whole museum of ingenious instruments is no substitute for thorough insight into the conditions and needs of a particular case, and skillful manipulation.

A curious fact—not indeed of frequent occurrence, but sometimes quite embarrassing both as to diagnosis and as to treatment—is what has been termed the *pseudo-pediculization* of the polypus; that is, in consequence of ulceration and inflammation the tumor has become adherent to some portion of the vagina or of the uterus, thus having a *false* as well as a true pedicle.

One of the accidents that may occur in the removal of the polypus is inversion of the uterus. Velpeau and Chassaignac mention such a case, but reduction occurred spontaneously; and Mr. Crosse, in four hundred cases of uterine inversion, found "forty in connection with the presence of a polypus in the interior of the womb; the accident sometimes taking place spontaneously, in other instances resulting from traction at the outgrowth in some attempt to accomplish its removal."

Finally the physician should remember—not for guidance in practice, but to avoid expressing an error in opinion—that the *spontaneous* cure of polypi must sometimes be recognized. Boivin and Duges give examples where the tumor was destroyed by gangrene or detached by rupture of the pedicle. Such gangrene, according to Klob, "is probably owing to stagnation of their circulation, in consequence of considerable traction or twisting of the pedicle."

INDIANAPOLIS, IND.

TWO NÆVI CURED BY MONSEL'S SOLUTION APPLIED EXTERNALLY.

BY JACOB GEIGER, M. D.

A male child, aged nine months, had at birth a "mother's mark" on his perinæum and over the pit of his stomach. They were at first flat but slightly-elevated spots, and quite small. When the patient was about six months old, however, the tumors took on a very rapid growth; that on the perinæum occupying not only the entire perinæum, but a portion of the scrotum also, while that on the abdomen was an inch in diameter. The perineal nævus was kept so constantly irritated by the child's diaper, his urine, and his fæces, and having on more than one occasion bled considerably, I advised an operation for its cure. The mother positively refused her consent to any other procedure than one which consisted in some external application. I determined therefore to try the methodical use of Monsel's solution to both the growths. Making a mixture of equal parts of the liq. ferri persulph. and glycerine, I painted not only the nævii themselves thoroughly with this, but I applied it also for some lines beyond to the healthy skin, and directed it to be repeated twice daily. In a week both tumors had diminished appreciably in size; and in less than one month from the date of the first application of the iron they had disappeared altogether.

St. Joseph, Mo.

Reviews.

Fistula, Hemorrhoids, Painful Ulcer, Stricture, Prolapsus, and other Diseases of the Rectum: their Diagnosis and Treatment. By WILLIAM ALLINGHAM, Fellow of the Royal College of Surgeons, England; Surgeon to St. Mark's Hospital for Fistula, etc. Second edition, revised and enlarged. Philadelphia: Lindsay & Blakiston. 1873.

Mr. Allingham, though not a hospital colleague of Dr. Ringer, seems to have had the latter's Hand-book in his eye when he composed the volume before us. It is written in the same direct, straightforward way, and is evidently the work of a practical surgeon, who, though aware, as he says, that his "composition is rough and often tautological," does not consider that his "inability to write elegant English should absolve him from his duty." Nor do we; but at the same time it is so easy a matter to have one's writings appear at least in a correct form that we can not hold the medical author guiltless who transgresses even the very commonest rules of grammar. "Eothen" said that when he saw a woman who had neglected her prime duty, which was to look pretty, he generally found that she had neglected most other duties besides. We would not have the same rule made to apply strictly to style in an author; but we do think we have a right to ask that every new candidate in authorship shall submit his labors to some competent drill-master, who, if he can not impart a style to the work, may at least save its readers from the grosser errors, incident in the present instance, we believe, to a carelessness for which we can find no palliation.

The first edition of Mr. Allingham's book contained not only the sins to which we have referred, but it was disfigured by some personal matters which were altogether gratuitous and in very poor taste. We are glad to find that they have in the main been omitted from the handsome American reprint.

Our readers had some months ago an opportunity, in the copious extracts made for the Clinic, of judging of the matter of Mr. Allingham's work. They can now obtain the book itself, which, in spite of the blemishes we have touched upon, is one of the most valuable contributions which have yet been made to anal surgery.

A Hand-Book of Therapeutics. By SIDNEY RINGER, M. D., Professor of Therapeutics in University College, Physician to University Hospital, London. Third edition. New York: Wm. Wood & Co. 1872.

We had been so struck by the direct and practical way in which Dr. Ringer discussed therapeutics in his contributions to the periodical literature of England, that when he appeared as the author of a work on that subject we at once sent for a copy and gave it very full notice in this journal in 1871. Through the enterprise of the American publishers the third and last edition of Dr. Ringer's Hand-book has been brought within easy reach of the profession in this country, and we have no doubt that it will be very extensively read. It certainly deserves to be. It is in many respects a most noticeable work. It contains more matter in the same space than any work with which we are acquainted. In spite of an utter absence of style—nay, of a positive awkwardness of expression, which we can but regard as altogether inexcusable in a medical author—Dr. Ringer has produced a book which is of the highest value both to the student and practitioner.

Clinic of the Month.

Arsenic in Skin Diseases.—Dr. McCall Anderson, who has done so much for the therapeutics of cutaneous diseases, thus records in his late work his opinion of arsenic:

"1. Arsenic judiciously administered is as safe a medicine as any in the pharmacopœia, and may often be used for months without injury to the general health. 2. It often requires to be continued for many weeks, and sometimes the disease seems to resist its action for a considerable time, when all of a sudden improvement occurs, followed by a rapid cure. 3. It requires to be given in proportionately larger doses to children than to adults. 4. Infants may be subjected to its influence by administering it to their nurses. 5. The dose should be at first small, and not increased, as a rule, for some time. Then it may be gradually increased till the medicine disagrees, or till the disease begins to yield, when it may as gradually be diminished. 6. It should not be omitted altogether without very good reason, but may be tried in smaller doses or in another form, or omitted for a few days, until the bad effects have passed off. 7. Puffiness of the face or irritation of the eyes, or such like physiological effects, if slight in degree, should not lead us to discontinue the medicine. Indeed it is sometimes only then that its beneficial action on the disease is observed. 8. It is decidedly contra-indicated in acute cases; and when its use is followed by marked increase of the irritation of the skin (itching, heat, etc.) the disease is probably not in a state to be benefited by it. 9. It is generally more rapidly effectual if the disease, though in a chronic state, is recent; and the first attacks yield more readily to it

than subsequent ones, as a rule. 10. It is contra-indicated in most cases which are complicated with digestive derangement. 11. It is apt to produce bronchial catarrh, so that patients should be warned to avoid exposure to cold while taking it; and for this reason it is generally contra-indicated in persons laboring under bronchitis. 12. In exceptional cases it may be given with benefit in large doses. 13. It sometimes requires to be given during meals, or immediately after food is taken; for when administered on an empty stomach it occasionally deranges the digestive organs, and it is often better tolerated if given along with a bitter infusion. 14. It should not, as a rule, be entirely discontinued until some weeks have elapsed since the complete disappearance of the eruption. 15. There are few chronic diseases of the skin of constitutional origin—provided they are not syphilitic—which may not be benefited by it (although often other treatment is to be preferred to it); but it is especially valuable in psoriasis, pemphigus, lichen ruber, pityriasis rubra, and in many cases of eczema, unless contra-indicated as above."

Acupressure, Acutorsion, and Torsion.—Prof. Billroth has applied *(Schmidt's Jahrbücher)* these methods in the occlusion of about two hundred arteries, and in fifteen instances to the femoral, in some of which the thigh was amputated high up. There was no opportunity of applying any of the methods in amputation at the hip-joint, and Professor Billroth does not think that any one is suitable in amputation at the shoulder. Acutorsion was more frequently practiced than acupressure. In one instance only was the removal of the needle followed by hemorrhage, the cause of which was faulty introduction of the needle; the artery, which was the brachial, was compressed by the proceeding of acupressure alone. Practically, acutorsion is the preferable proceeding. It is safe, and in amputation easily applicable, but can not be substituted for the ligature in every case. With regard

to the material of the needle, Prof. Billroth has concluded in favor of gold, which for short needles of moderate strength is to be preferred to any other material. Simple torsion has been tried by Prof. Billroth in excisions of the breast, but seldom with any good results. The cause of these failures is the absence in excision of the mamma of conditions favorable to this method. In torsion the end of the vessel should be well isolated, and the stump of the artery be seized by firmly-compressing forceps, and finally, the end of the artery must be at some distance from the origin of the nearest branch. Prof. Billroth has frequently practiced torsion with very good results in amputations at the leg, foot, arm, and forearm, and applied it to the majority of the arteries in amputation of the thigh. In one case only did he find subsequent hemorrhage; this was from the posterior tibial artery. Much traction and twisting of the artery produce a long thrombus, but are attended with this disadvantage, that most of the twisted portion of the vessel becomes necrosed. Extended thrombus formation and the danger of necrosis forbid the practice of torsion in venous hemorrhage, which may be readily controlled by ligature or acupressure. In amputations below the knee and elbow, torsion is a very reasonable proceeding so long as no branch springs immediately above the divided end of the artery.

Torsion as a Means of arresting Hemorrhage.—Dr. W. Colles (Irish Hospital Gazette) says: "I would throw out a suggestion that even in the continuity of the artery we might adopt a modification of this treatment. Thus, after laying bare the artery, we might catch it transversely in a narrow forceps, and press it so as to divide the inner layers, and then push them away from the outer coat upward and downward, leaving the outer coat *in situ*, and to contract. I throw out the suggestion, hoping it may be the means of inducing others to pursue the investigation of this subject.

As the result of my observations, I have no hesitation in proposing the torsion of arteries as the safest and simplest means of arresting bleeding in wounds, merely recommending that the artery should be as free and isolated from surrounding tissues as possible, and that the surgeon should hold the parts at the point of the forceps so as to cause the twisting to commence at the forceps, and from this gradually extend upward along the vessel. For the last six or seven years, in Stevens's Hospital, my colleagues and I have seldom resorted to any other means of arresting hemorrhage, even from the largest vessels, and we have never had any reason to regret the adoption of the practice."

Manual Rectal Palpation of the Pelvis and Abdominal Organs.—Dr. Gustav Simon *(Göschen's Deutscher Klinik,* as also in *Arch. für Klin. Chir.)* describes his method of exploring the pelvis. The patient is placed on the back, either in the lithotomy or ordinary obstetric position, chloroform to complete insensibility is given, and then first two and subsequently three and four fingers are passed gradually in by a rotatory movement. Bimanual manipulation is enjoined, the other hand being pressed over the abdomen. Tearing of the sphincter seldom occurs if care be taken, and the operator's hand be not too large. Some temporary but no permanent inconvenience may follow. The examination is useful for all cases of disease of the pelvic organs, especially the uterus, ovaries, and broad ligaments, and of the bladder (in men) as also for tumors in the lower half of the abdomen. In midwifery it is likely to prove very useful. The first cases examined were vaginal fistula, cancer, ovarian tumor, and fibromyoma of the uterus. No incontinence whatever ensued, the explorations being repeated three to five times.

Constipation in Children.—Dr. Alois Monti *(Wien. Med. Presse)* contributes an exhaustive paper on this subject. He

thinks it due to the defective development of the muscular tissue of the intestines, and to the peculiar form of nourishment at this period. He sums up the various causes: 1. Mechanical impediment, as in congenital deformity, imperforate anus, invagination, hernia, etc.; 2. Defective nourishment, as from congenital defects of the lip and throat, too little secretion of milk, etc.; 3. Faulty nourishment, as from excess of caseine or defect of fatty matters in the milk, bringing up by hand, starchy food, etc.; 4. Deficiency or diminution of the peristaltic movements of the intestines, atrophy, etc.; 5. Diminution of the intestinal secretion, as in long-continued diseases in consequence of anæmia. Constipation is further a symptom of diseases of the brain and spinal cord; also a consequence of deficiency of drinks, of the use of astringents, presence of ascarides, fruit-stones, etc.; and in other children it arises in consequence of deficient bodily exercise. The cause suggests the remedy—cod-liver oil and enemata of cold water, mineral waters, manna, etc.

Treatment of Prurigo and Pruritus by Carbolic Acid. Dr. Rothmund *(Ærztl. Intelligenzblatt)* states that the internal administration of carbolic acid in pruritus excels every other method. He has tried also the hypodermic injection of it with marked success, there being no local irritation produced, as one would expect, beforehand. Solutions of pure carbolic acid seem to be more efficacious than those of carbonate of soda.

Surgical Treatment of Ozena.—M. Rouge has endeavored to prove *(Lyon Médical)* that this always depends upon lesion of the bones of the nasal cavity. Hence the insufficiency of ordinary therapeutic means, and the spontaneous cures accompanied by expulsion of sequestra. His operation avoids deformity. He incises the mucous membrane in the gingivo-labial furrow from the left to the right molar, dividing

the frænum near its root; cuts down upon the anterior nasal spine; detaches by the bistoury the cartilaginous septum, and (if necessary) divides with the scissors the nasal cartilages at their maxillary attachment, and divides their septum. The nostril can then be turned upward. He then seeks for the necrosed or carious portions of bone, removes them, and applies nitrate of silver to the mucous membrane. The parts are thoroughly cleansed and replaced. Reunion by first intention has always followed. Recovery has been immediate, and the results quite successful in the seven cases on which he has operated.

Gleet treated with Medicated Bougies.—G. Lorey gives the results of eighty cases of gonorrhea and gleet treated by this means. The cases of gleet, twenty in number, were all cured in a short time. The longest course included twenty-two bougies, one a day, and the shortest three bougies, the average being nine. The author observes that these cases, being treated in a hospital, doubtless derived benefit from the regular life there. It is not uncommon for a gleet to be greatly exacerbated by a long walk, slight excess in drinking, or a single act of coition. The bougies used were seven and a quarter inches long—*i. e.*, about the length of the urethra—and from one eighth to one sixth of an inch in diameter. The center was of gelatine, the outside of gum arabic mixed with the medicine, three fourths of a grain each of sulphate of zinc and belladonna. After being dipped in cold water, they are easily inserted. In the sixty cases of gonorrhea no such striking results followed. The bougies served as well as the ordinary injections to cut short the disease—no better. But for two of the incidents of gonorrhea, pain in making water and nocturnal erections, bougies medicated with opium (three fourths grain), or opium and belladonna (each three fourths grain), acted admirably. Put in at night, they insure comfortable rest and easy micturition in the morning. It has

been urged that, like permanent bougies, they might produce orchitis; but they are dissolved in the course of an hour and a half, and no orchitis occurred in any of the eighty cases observed by M. Lorey. (New York Medical Journal.)

The Value of the Endoscope.—Prof. F. N. Otis, M. D., of the College of Physicians and Surgeons, New York, has recently contributed to the New York Medical Journal an unusually valuable paper on the treatment of urethral stricture with the dilating urethrotome, in which he takes occasion to deal the endoscope the following heavy and, as we believe, deserved blow:

"In claiming the general dependence of chronic urethral discharges upon disturbance of the urethral caliber, I am not unaware of the importance attached by many specialists to the presence of local points of granulation, or papillary hypertrophy, along the course of that canal. Accepting the views of Desormeaux, Cruise, and others, I have, in days past, been a firm believer in the value of the endoscope for defining those points with the certainty of ocular inspection, and in the efficiency of local treatment by strong solutions of the nitrate of silver applied to the granulated surfaces through the endoscope; but I have of late so frequently observed the same appearances, and by means of the large bulbous sounds have been able to detect bands of stricture underlying them; and further, have seen the granular condition of the mucous membrane promptly disappear upon the complete division of the stricture, without any other treatment, that I have come to look upon the endoscope as a mischievous invention as used for the relief of chronic urethral discharges. The improvement and often apparent cure which I have seen resulting from local applications through the endoscope has proved fallacious, for slight and often unrecognized causes have determined the return of the difficulty. I therefore now venture the opinion that localized granular urethritis will be found to

result from interference with the muscular movements or with the caliber of the urethra in every instance."

Treatment of Rhus-poisoning. — Dr. James C. White, Professor of Dermatology in Harvard University, appears, in the New York Medical Journal, in a most interesting communication on the action of *rhus venenata and rhus toxicodendron* upon the human skin, from which we make the following extract on the management of the poison:

"A great many remedies have been recommended in both medical and botanical books for the treatment of persons poisoned by rhus, while others of a 'domestic' character are used in various parts of the country. Among the former a solution of acetate of lead holds the most conspicuous place. Torrey, in his Botany of New York, says one of the best applications is a solution of sugar of lead after the use of saline cathartics. Mr. Bigelow (Medical Botany) thinks the application of acetate of lead as useful as any external palliative, and that it should be used as cold as possible. Solutions of sulphate of copper and of other metallic salts have also been recommended by physicians. Among the domestic remedies vinegar and solutions of saleratus and carbonate of soda are widely and highly esteemed. A decoction of Virginia snake-root *(serpentaria)* is also supposed to possess special power against the poison. In an old copy of Bigelow's Florula Bostoniensis I find, in connection with rhus toxicodendron, a marginal note by its former owners stating that if soft-soap be rubbed thoroughly into the hands after handling specimens its poisonous action will be prevented.

"It is evident from our knowledge of the nature of the poison and its effects, as above described, that two distinct questions are to be considered in connection with the treatment of rhus-poisoning, as in toxicological therapeutics generally: first, that of the necessity and selection of an antidote; second, that of the proper management of the changes in the

tissues of the skin. So far as I know, these have never been sufficiently recognized by writers and practitioners, perhaps because we were so long ignorant of the true chemical nature of the poison; and the reputation which some of the above-mentioned remedies have perhaps justly acquired rests upon their successful action in one or the other of these directions, according to the period in which they may have been used.

"Whether or not we should resort to an antidote must of course be determined by the length of time since the parts affected were in contact with the plant or its exhalations. As the poisonous principle is of a volatile character, it is questionable how much good can be done in this direction after the first day, or even then after the hands have been washed with simple water. How long the poison may retain its characteristic peculiarities after absorption by the skin, and how readily our antidote may follow and penetrate to it, are also matters of uncertainty. As to the nature of the remedies to be used at this stage and for this purpose, there can be of course no longer any question. We have to deal with an acid, and the antidote for an acid is an alkali; that is, provided the salts thus formed are not equally poisonous. This is consistent with the popular reputation of solutions of salaratus and soda as remedies, and will explain the action of the soft-soap above mentioned. These are true antidotes, but they can be of benefit only from their chemical action, and in this way. In the later stages, or in other words, against the subsequent eczematous changes in the cutaneous tissues, they can do no good. The action of that most popular of all remedies in this affection, the solution of sugar of lead, is a mixed one, and seems to have been happily, though unwittingly, selected as an appropriate remedy in all stages. Toxicodendric acid precipitates from it an insoluble and therefore harmless salt, while its astringent action is well adapted in many cases to the relief of the inflammatory processes in the skin.

"The treatment of the later stages of rhus-poisoning—that

is, of the eruption it produces—need not be specially considered, for it is mainly that of the corresponding varieties of ordinary acute eczema. It is seldom that the physician is called upon before the inflammatory process is well developed, so that there generally remains for him only the selection of the applications appropriate to a simple eczema of the same stage. In the great majority of cases I have found black-wash—calomel ʒj, lime-water Oj—by far the best application to the affected parts, used as an evaporating lotion upon thin and old linen or cotton cloth, for half an hour or one hour at a time, two or three times a day. I have used in connection with it, to moist or excoriated parts, a powder of oxide of zinc ʒj, starch ℥j, or plasters of oxide of zinc or diachylon-ointment, as in the management of ordinary eczema. In the black-wash we have possibly three elements at work in our favor: first, the alkali as antidote, if it is of any avail at such periods; second, the action of cold from evaporation upon the local hyperamy; and third, the astringent effect of the mercurial powder upon the diseased tissues. In all cases of poisoning I have been entirely satisfied with its effects, however extensive in distribution or advanced in development the inflammatory condition of the skin. Only upon the thickened epidermal coverings of the efflorescences in the palms does it seem ineffectual. To these tardy and well-protected manifestations I apply solutions of corrosive sublimate, from one to two grains to the ounce of water, in the same way as the black-wash is used upon the other parts. By these means the eczematous process is checked and shortened, and the subjective symptoms greatly alleviated. Of any internal treatment of direct bearing upon the affection I have never seen the operation or need. A simple and restricted diet in severe cases is of course to be observed."

Carbazotate (Picrate) of Ammonia as a Substitute for Sulphate of Quinine.—In a paper on this subject by

Dr. Dujardin-Beaumetz, in the *Gazette Médicale de Paris*, he says:

"1. That carbazotate of ammonia is a very effective agent in the treatment of intermittent fevers; 2. That the suppression of the attack may be accomplished by the administration of from two to four centigrammes (one fifth to half a grain) of the carbazotate in twenty-four hours; 3. That in these doses the remedy never appears to have any noxious effects, but is in point of fact better borne than quinine; 4. That this preparation of picric acid is not dangerous; 5. That the physiological action of carbazotate of ammonia presents very close analogies with that of sulphate of quinine; 6. That the use of this remedy should become more general, and that in a large number of cases it is destined to replace the sulphate of quinine." (Practitioner.)

Treatment of Typhoid Fever.—The following is said (*Journal de Médicine*) to be the treatment of typhoid fever pursued by M. Péter, Professor Agrégé of the Hôpital de la Charité:

Every other day he gives a glass of Seidlitz water, and morning and evening an emollient injection. The injection he considers to be useful in removing putrid matters. The glass of aperient fluid, without exhausting the patient like a daily purge, also keeps the intestinal canal clear from disintegrated matter. He uses the sulphate of quinine in quantities amounting to from seven to fifteen grains per diem as a febrifuge, increasing the dose in proportion to the intensity of the attack. He places great reliance on alcoholic stimulants, prescribing every day four or five ounces of quinine wine, which is made into a lemonade so as to make from two to three pints of fluid, by which means the vegetable acids are freely and easily administered. These, he thinks, remove the crusts of the tongue, and the symptoms produced by putridity are removed. If the case goes on from bad to

worse—if the fever becomes more intense, the temperature increasing, and nervous phenomena supervening—he willingly has recourse to the action of cold, but does not adopt either baths or even cold effusion, which require, he thinks, great circumspection in their application, but contents himself with simply sponging the surface of the body with a sponge dipped in vinegar. Two assistants are required; one lightly passes the wet sponge over the skin, while the second rapidly rubs it dry with a soft cloth and quickly covers it. He considers one washing per diem to be enough. (Practitioner.)

On the Treatment of Scabies in Children.—Dr. Alois Monti, knowing by experiment that copaiva balsam kills the itch-insect, tried it in cases in children. After previous washing, it is rubbed in two or three times a day, producing severe redness, which passes off in half an hour. The itching usually ceased after the first inunction. The irritation of the skin diminished and disappeared entirely after three to four inunctions. The cure was in every case complete. The duration of the treatment varied from two to twelve days. It is cheaper than Peruvian balsam, has a pleasant smell, does not soil the linen, and is, especially for infants, preferable to sulphur.

Carbolic acid in solution, fifty-six grains to the pound of water, or as ointment, fifty-six grains to four ounces of simple ointment. After first cleansing the skin use it as a wash or inunction, or in scabies purulenta as a poultice. It produces redness and slight burning, which soon disappears. In all the cases so treated complete cure was effected, generally after six to nine inunctions, within two to four days. If eczema exist with it, it is generally longer—about twelve days. The author never observed poisoning. It produces no eczema, is very convenient, less costly than Canada or Peruvian balsam, and has the advantage over styrax that the linen is cleansed and disinfected. (Edinburgh Med. Jour.)

Notes and Queries.

THE TRANSFUSION OF BLOOD.—The Transfusion Committee, appointed by the Obstetrical Society of London, has adopted the following programme of its aims and objects: 1. To collect evidence from gentlemen who have had experience in cases of transfusion; 2. To obtain the particulars of all recorded cases (performed on the human subject), with the view of finding out as far as possible to what extent the so-called successful cases were due to transfusion; 3. To examine the various kinds of instruments used in both the mediate and immediate forms of the operation; 4. If considered necessary, to institute further experiments for the purpose of determining how far transfusion may be relied upon as a means of saving life, and also the best mode of performing the operation. The Committee will be happy to receive communications on the subject, which should be addressed to the honorary secretary, Dr. Madge, at the Society's Library, 291 Regent Street, W. (London Medical Record.)

NEW METHOD OF PRESERVING TUMORS, ETC., DURING TRANSPORTATION.—Dr. Joseph G. Richardson, of Philadelphia, has found the following method of preserving certain objects for the microscope the best where they are to be transported. His experience on the matter is valuable.

"Place a small fragment of any tumor or pathological structure, say a quarter to half an inch square and one tenth of an inch thick, in a couple of drachms of saturated solution of acetate of potash, and allow it to fully imbibe the fluid by soaking therein for forty-eight hours. The solution referred

to is best made by simply pouring half an ounce of rain-water upon one ounce of dry granulate acetate of potash, in a clean bottle. When the tissue is fully saturated with this saline liquid remove it by means of a pair of forceps, without much pressure, and insert it in a short piece of India-rubber tubing, or wrap it up carefully in a number of folds of thin sheet-rubber or of oiled silk, tying the whole firmly at the ends with strong thread. When thus prepared specimens can be inclosed with a letter in an ordinary envelope, and sent long distances, doubtless thousands of miles, by mail without danger, on the one hand, of decomposition, because of the preservative power of the potassic acetate, or on the other of desiccation, on account of its exceedingly deliquescent nature."

Cincho-quinine.—In answer to several inquiries concerning the nature and uses of this comparatively new alkaloid, which seems just now to be exciting marked attention in the profession, we republish from the Boston Journal of Chemistry for June, 1869, the following account of the salt. As the season of the year is approaching when the products of the bark will be in great request, we should be pleased to have from such of our readers as use the cincho-quinine a report of their experience with it, especially as compared with the sulphate of quinia. There seems good reason for believing it to be a very valuable addition to the list of antiperiodics.

"Acting upon the idea that the natural alkaloidal principles of bark in their simple, unchanged condition, separated from the gross, woody, and other matters, would better subserve all therapeutical ends than the barks themselves, or *any one* of the alkaloids separately employed, cincho-quinine has been prepared.

"Cincho-quinine contains no external agents, as sugar, licorice, starch, magnesia, etc. *It is wholly composed of the bark alkaloids:* first, quinia; second, cinchonia; third, quinidia;

fourth, cinchonidia; fifth, other alkaloidal principles present in barks, which have not been distinctly isolated, and the precise nature of which are not well understood. In the beautiful white amorphous scales of cincho-quinine the whole of the active febrifuge and tonic principles of the cinchonia barks are secured without the inert, bulky lignin, gum, etc. It is believed to have these advantages over sulphate of quinine:

"1. It exerts the full therapeutic influence of sulphate of quinine, in the same doses, without oppressing the stomach or creating nausea. It does not produce cerebral distress, as sulphate of quinine is apt to do; and in the large number of cases in which it has been tried it has been found to produce much less constitutional disturbance.

"2. *It has the great advantage of being nearly tasteless.* The bitter is very slight, and not unpleasant to the most sensitive, delicate woman or child.

"3. It is less costly than sulphate of quinine. Like the sulphate of quinine, the price will fluctuate with the rise and fall of barks, but it will always be less than the lowest market-price of that salt.

"4. It meets indications not met by that salt."

French Compliments to British Surgeons and Surgery. The death of Napoleon III. has given rise to some feeling between the doctors on the two sides of the channel. The French surgeons claim that Nelaton discovered the calculus, but advised the Emperor against an operation, saying it would be fatal; and this is made the text for some very brutal assaults on English surgeons in general and Sir Henry Thompson in particular. A French surgeon of distinction, but whose name is not given, expressed himself to a newspaper correspondent as follows:

"You have come to talk to me about Sir Thompson," said he at once. "He is a skillful man. He is not the best of the English surgeons, nor is he the worst. He operates very well, but too quickly,

and above all with too great ease. He has coolness, but no feeling; he works for the gallery, not enough for his patient; and, provided the public praises his promptness and his dexterity, he cares very little for the rest; for he knows very well that beyond the patient's family, which appreciates the art otherwise than from a love of art, the public is full of indulgence for sleight-of-hand. Death can always be very easily explained by the fragility of our feeble nature. This is, moreover, the fault of the English surgeons of our day. Sir Astley Cooper, their greatest operator, knew it and deplored it during his latter days. Sir Astley Cooper is dead, and, believe me, dead altogether. [That is to say, his art has died with him.] Sir Thompson does his surgery as Berger does his billiards; the two are equally celebrated. I saw Thompson a few years ago at Paris. He is a magnificent Englishman; tall, blonde, with an audacious eye and an air of revery, a high and intelligent forehead, a straight nose, the mouth being scornful and full of *cant.* Aristocrat to the tips of his fingers, he became celebrated by operating upon the King of the Belgians, who is dead. He arrived at illustrious notoriety in operating upon Napoleon III.; that is the second work carried from bad to worse, and he awaits a third. He is not a *savant*, for his works are compilations disavowed by every body; he is not an anatomist, for the English are never anatomists, or are so no longer. He is a stone-breaker, and that is all; and, as you can see, a stone-breaker who has very small luck. Ah! we need not glance down the list to be proud of our surgery. There are not two surgeons in France who would have done as he did."

"That does not alter the fact," said I, "that this calculus was remarked by your grand Nelaton."

"My dear friend," said he, "each surgeon has his own way of acting, and I believe in each. When one says, You have a stone in the bladder, that means in simple French, I propose to get rid of it for you. Do you seize the shade of difference? What good is there in telling a patient that he has a calculus if the conditions are unfavorable for an operation? Nelaton felt the stone; but he felt also that the surrounding organs were so much deranged that death was certain. He notified M. Corvisart and the family, and said that he would send a surgeon from Paris to perform the operation whenever practicable. Things went on from bad to worse. Other disorders set in; the machine was used up; the disease without remedy; an operation was certain death at very short date.

Thompson decided upon operating when Nelaton would not. The Napoleons will always do wrong to trust to the English. I can see him from here, this big devil of an Englishman, Thompson, with his slow and masterly brutality, introducing his instruments into the organs of a moribund, and going ahead with British 'cheek' and coolness, *ad angusta, per angusta*, like the conspirators in Ernani. The result was not doubtful, and—you know the rest."

The assertion that British surgery died with Sir Astley Cooper is good—very.

The Louisville College of Pharmacy.—The following are the names of the directors for the current year of this excellent institution: F. J. Pfingst, Wm. G. Schmidt, E. Scheffer, John Colgan, P. P. Sutton, F. C. Miller, C. L. Diehl, V. Davis, S. F. Dawes, J. A. McAfee, B. F. Alford, and E. N. Woodruff. The directors organized by electing C. L. Diehl president, E. Scheffer and B. F. Alford vice-presidents, T. C. Miller recording secretary, Wm. G. Smith corresponding secretary, S. F. Dawes treasurer, and J. A. McAfee curator.

The directors recently appointed a board of trustees, consisting of Messrs. Schmidt, Davis, Colgan, Sutton, and Pfingst, for the purpose of creating a building-fund to enable the College to erect a suitable building for the growing school. So far the subscriptions amount to nine hundred and ninety-six dollars. The following matriculates passed satisfactory examinations at the close of the session: Ed. S. Anderson, John Leomis, Henry Voigt, Ed. D. Caldwell, Chas. R. Deckress, and Ph. G. Beutel.

With such enterprise and spirit as the officers of this young school have exhibited, there can be no doubt as to its ultimate success. In a very few years a fund will have been acquired large enough to erect a first-class building, and equip it in the best style. In the mean time the faculty have commodious rooms and every appliance necessary for successful teaching.

American Medical Association.—The Twenty-fourth Annual Session will be held in St. Louis, Mo., May 6, 1873, at eleven o'clock A. M. The following committees are expected to report:

On Cultivation of the Cinchona-tree—Dr. Lemuel J. Deal, Philadelphia, Pa., Chairman.

On Measures to Prevent the Extension of Diseases of Inferior Animals to Man, and the Sanitary Measures to arrest the Progress of such Diseases in Animals—Dr. A. W. Stein, New York, N. Y., Chairman.

On the Treatment of Fractures—Dr. Lewis A. Sayre, New York, N. Y., Chairman.

On Gunguillia, a Substitute for Quinia—Dr. William Chew Van Bibber, Baltimore, Md., Chairman.

On Gynecology—Dr. Montrose A. Pallen, Saint Louis, Mo., Chairman.

On the Renewal of Prescriptions without Authority, and on the Relations of Physicians and Druggists—Dr. R. J. O'Sullivan, New York, N. Y., Chairman.

On Vaccination—Dr. T. N. Wise, Covington, Ky., Chairman.

On Skin Transplantation—Dr. J. Ford Thompson, Washington, D. C., Chairman.

On some Diseases peculiar to Colorado—Dr. John Elsner, Denver, Col., Chairman.

On Correspondence with State Medical Societies—Dr. N. S. Davis, Chicago, Ill., Chairman.

On National Health Council—Dr. Thos. M. Logan, Sacramento, Cal., Chairman.

On Nomenclature of Diseases—Dr. Francis Gurney Smith, Philadelphia, Pa., Chairman.

On American Medical Necrology—Dr. J. D. Jackson, Danville, Ky., Chairman.

On Suggestions on Medical Education—Dr. A. M. Pollock, Pittsburgh, Pa., Chairman.

On Medical Education—Dr. William Carson, Cincinnati, Ohio, Chairman.

On Medical Literature—Dr. Austin Flint, New York, N. Y., Chairman.

On Prize Essays—Dr. John S. Moore, St. Louis, Mo., Chairman.

On Plan for better Arrangement of Sections and more rigid Examination of Papers offered for Publication—Dr. E. L. Howard, Baltimore, Md., Chairman.

On Ethics—Dr. H. F. Askew, Wilmington, Del., Chairman.

On the Climatology and Epidemics of the several States and Territories—By a medical man in each.

Physicians desiring to present papers before the Association should observe the following rule: "Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the secretary to whom such papers are sent to examine them with care, and, with the advice of the chairman of his section, to determine the time and order of their presentation, and give due notice of the same." . . .

Officers of Sections.

Chemistry and Materia Medica—Drs. R. E. Rogers, Philadelphia, Pa., Chairman; Ephraim Cutter, Boston, Mass., Secretary.

Practice of Medicine and Obstetrics—Drs. D. A. O'Donnell, Baltimore, Md., Chairman; Benjamin F. Dawson, New York, N. Y., Secretary.

Surgery and Anatomy—Drs. Edward Warren, Baltimore, Md., Chairman; W. F. Peck, Davenport, Iowa, Secretary.

Meteorology and Epidemics—Drs. George Sutton, Aurora, Ind., Chairman; Elisha Harris, New York, N. Y., Secretary.

Medical Jurisprudence, Hygiene, and Physiology—Drs. S. C. Busey, Washington, D. C., Chairman; A. B. Arnold, Baltimore, Md., Secretary.

Psychology—Drs. Isaac Ray, Philadelphia, Pa., Chairman; John Curwen, Harrisburg, Pa., Secretary.

Amendments to be Acted on.

(TO CONSTITUTION.)

Resolved, that the United States Marine Hospital Service be placed in the same relative position in the American Medical Association as the Medical Departments of the United States Army and Navy; and that in paragraph 2 of the 2d section, after the words "army and navy," the words "and the United States Marine Hospital Service" be inserted.

(TO BY-LAWS.)

SEC. III.—*Standing Committees.*

That instead of a report on Medical Education, on Medical Literature, and Climatology and Epidemic Diseases, there shall be annually delivered before the Association at its general meetings an address in Medicine, an address in Surgery, and an address in Midwifery, or the Diseases of Children; the lecturers to be appointed this year by the President, afterward by the Committee on Nominations.

Also, in section 6, after the words "the chiefs of the bureaus of the army and navy," be inserted "and the supervising surgeon of the United States Marine Hospital Service."

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the permanent secretary.

W. B. ATKINSON, *Secretary,*
1400 Pine Street, Philadelphia.

"NORMAL" OVARIOTOMY.—When Dr. Batty, of Georgia, extirpated the ovaries for painful menstruation the exploit was noticed in the review department of this journal. The operation was almost universally pronounced of questionable propriety; but we hoped, mainly for the sake of the surgeon, that it would yield good results in this particular case. We regret to learn, from the following note contained in the Philadelphia Medical and Surgical Reporter, that "the operation is a failure. The menstrual molimen and sanguineous discharge, with great suffering, still occur monthly."

THE AMERICAN PRACTITIONER.

MAY, 1873.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the ewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

DIASTASIS OF THE HEAD OF THE FEMUR AND ARTIFICIAL HIP-JOINT.*

BY LEWIS A. SAYRE, M. D.,

Professor of Orthopedic Surgery, Bellevue Hospital Medical College.

On the 5th of January, 1873, E. M. J., female, aged four years, of Poughkeepsie, N. Y., was brought to me with the following history.

On Christmas, 1870, being then twenty months old, and a very active, robust child, and having walked for three months, was left by her mother for about two hours in charge of the nurse. On her return the child was found lame in the left leg, which was shortened and slightly turned in, and has not been able to walk upon it or touch the floor since. The nurse insisted with great positiveness that she had received no fall or other accident during the mother's absence, and that she had not been out of her sight a single moment

*Read before the Medical Society of the State of New York, and recommended to be published in the Transactions of the same. Published in advance by permission.

The child being too young to contradict this statement, it had to be received for what it was worth.

As the parents were then living in London, the child was carried to the different hospitals and examined by various surgeons, who pronounced it a case of hip-disease, and advised leeching, blistering, and rest. The limb gradually contracted, adducted, and rotated, until in the course of a year it gradually assumed its present condition, as seen in fig. 1, which it has retained until the present time.

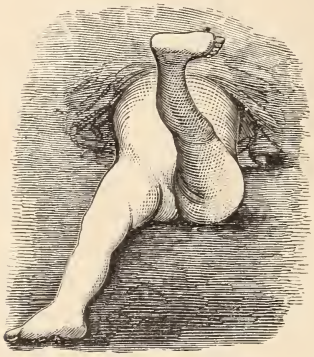


Fig. 1.

The parents moved to America in 1872. The child was taken to two of the public institutions of this city, where it was pronounced to be in the last stages of hip-disease. It was then sent to me for exsection of the hip-joint. Upon examination I found her to be a very robust and remarkably healthy child, and born of healthy parents. Upon stripping the child and laying her upon the floor upon her back, so that the spinous processes would touch the floor, while at the same time a line drawn from the center of the sternum over the umbilicus to the center of the symphysis pubis was crossed at a right-angle by a line drawn from one anterior superior spinous process to the other. In this position, the pelvis and trunk being held in their normal relation, the right leg could be extended straight with the body until the popliteal space touched the floor, while the left was standing at a right-angle with the body, slightly adducted, and rotated outward, nearly one half upon its axis, so that the heel was pointed in a line over the right shoulder, and the foot in the opposite direction. In this position the limb was permanently fixed and apparently anchylosed, as seen in fig. 1, from photograph by O'Neal.

There was no pain or tenderness around the joint upon the most severe pressure, and the mother said that there had not been for a year past. The child would bump herself along on the floor upon her bottom as fast as most children would creep, and this was her mode of locomotion. When standing up the thigh was at a right-angle with the pelvis, adducted across the upper third of the opposite thigh. The back was strongly curved at the junction of the dorsal and lumbar vertebræ, but not sufficiently to enable the foot to touch the floor. (Fig. 2.)

Fig. 2.

There has been no suppuration about the joint, abscesses, or other evidences of carious disease of this articulation. The prominence in the gluteal region, which had been mistaken for an abscess, was caused by the projection of the trochanter major, which upon examination by Nelaton's test* proved to be an inch above the line, indicating that there must be either a fracture or luxation.

The outward rotation of the foot contra-indicated luxation on the dorsum of the ilium, and there was therefore nothing

* Nelaton's test consists in drawing a line from the tuberosity of the ischium, around the outer part of the thigh, to the anterior superior spinous process of the ilium of the same side. In the normal relation of the parts this line passes directly over the top of the trochanter major. Any deviation from this condition indicates an abnormal position of the natural relation of the parts. In fracture of the neck or luxation on the dorsum ilii the trochanter major will be above the line. In luxation into the foramen thyroideum the trochanter will be below the line.

left in the diagnosis but fracture through the neck, or its equivalent in a young subject, *diastasis*, or separation of the head from the neck at its epiphyseal junction.

The suddenness of the occurrence, the entire history of the case, and its present condition confirmed this opinion. The child was placed under chloroform, and with some force limited movements could be obtained, showing that anchylosis had not occurred.

A pair of wire breeches were ordered for her; and on January 22, 1873, at Bellevue Hospital, in the presence of the class, I put her under chloroform and subcutaneously divided the adductor longus, gracilis, and tensor vaginæ femoris muscles, closed the wounds with adhesive plaster, and with some little force broke up the adhesions, and brought the limb parallel with the other, and nearly of the same length. She was then placed in the wire breeches, which had been well padded, the well limb straightened so as to bring the foot firmly against the foot-piece, while the anus had been secured in its proper place for defecation. The limb was then secured by a roller from the foot up, with a piece of pasteboard over the leg and thigh, to keep the knee from bending, so as to make that limb a solid column against the foot-board for counter-extension.

Fig. 3.

The deformed limb was dressed by placing strips of adhesive plaster on each side from just above the ankle to the middle of the thigh, and secured by a well-adjusted roller from the foot up, leaving a few inches of the plaster on either side of the lower extremity, which were pinned around the foot-board which had been screwed up to meet the shortened limb. A few turns of the screw readily brought the limb

Fig. 4.

down to the desired length, and it was secured to the other leg of the wire breeches by a roller, and the dressing was complete, as seen in fig. 3.

She was sent home to her boarding-house in a little hand-carriage, and has been out riding every day, notwithstanding the inclement weather, without the slightest inconvenience. She returned to the hospital on January 29th. The wounds

had entirely healed without suppuration, only a very slight echymosis existing around the puncture over the tensor vaginæ femoris. She was re-dressed completely with the exception of the adhesive plaster on the extended limb, the limbs washed, passive movements given to all the joints, and replaced in the wire breeches, as before, for another week.

February 4th, applied my splint for extension. (See fig. 4, from photograph.) This case of course is not sufficiently complete to prophesy its ultimate result; and my only excuse for bringing it thus early before the profession is to enable me to present you the only similar case that has come under my observation in which, having obtained the specimen by the death of a patient from another disease, I am permitted to show the practical benefit of the treatment here described, and which I have not before published.

J. H., aged four years, 72 North Moore Street, a robust boy of healthy parents, was brought to me in December, 1860, presenting almost identically the position and history of the child above described. He had fallen down the cellar steps when twenty-two months of age, and when picked up his leg was found to be a little shorter than the other, and he was unable to use it. The deformity was so slight that but little attention was paid to it for many months, when his leg was observed to have gradually contracted until it had assumed almost exactly the position as seen in fig. 1 above described. He had been seen by various dispensary doctors, most of whom had looked upon it as a case of contraction from rheumatism, and treated it accordingly by internal remedies and external lotions, but without benefit.

Diagnosticating the case as one of diastasis with deformity from muscular contractions, I treated him precisely in the manner described in the first case, with the exception that the extension splint at that time was only applied to the outer side of the limb, and extended nearly to the ankle-joint, thereby obstructing the motions at the knee. The great

advantage of the splint I now use over the long one which I formerly employed is that it permits motion of this joint. He used the long splint, with crutches, for nearly two years; when having devised my short splint, which is now in general use, it was applied and worn for about eighteen months, but for most of the time without his crutches as well as with them.

The motions of his hip-joint were almost complete in flexion and extension. Abduction was about one third the normal movement; and adduction not quite normal, although he could cross his legs with tolerable freedom. The limb was an inch and a half shorter than the other, and not so well developed, and the trochanter major was nearly an inch above the line by Nelaton's test; but as it remained in this position when the splint was removed, and he bore his weight upon the limb, the case was considered cured, and no further treatment applied. With a slight lift upon the heel of his boot, to supply the deficiency in the length of his limb, he was enabled to run and play almost as actively as any of his schoolmates.

He died in 1866 (nearly six years after the operation) of peritonitis from cholera morbus; and I was fortunate enough to get a post-mortem examination and obtain the following specimen (see fig. 5), which is the ilium of the diseased side. You will observe the acetabulum (*a*) is irregular, contracted, and triangular in shape. It was filled by the remnants of the head of the femur, which almost exactly fitted it. A new acetabulum (*b*) has been formed upon the dorsum of the ilium, which is surrounded by an exostosis of sufficient depth to make a buttress, which prevents the femur from gliding further upward. To its crescentic edge was attached a dense, firm ligament, which also embraced the trochanter major, and which

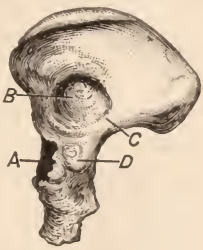


Fig. 5.

allowed a very free and smooth motion between the bones. A portion of this new acetabulum, as seen at *c*, is eburnated and very highly polished, and almost exactly corresponds with the portion of the neck of the femur which fitted against it, and was similarly eburnated and polished. No membrane or articular cartilage lined this cavity or covered the end of the femur which rested against it. The motion between the two was like that between two polished ivory surfaces or porcelain plates. Just opposite the original acetabulum is a small, smooth facet, where the end of the femur must have rested for some time previous to my operation on the tendons.

As this is the best specimen of artificial hip-joint which I have seen, I have thought it worthy of presenting to the State Society.

TWO CASES OF CEREBRO-SPINAL MENINGITIS.

BY GEORGE N. MONETTE, M. D.,
Visiting Physician to the Charity Hospital, etc., New Orleans.

CASE I. Araminta, colored, aged fourteen years, came under my observation, February 18th, suffering with a most excruciating cephalodynia, transient paroxysms of pain in the lower extremities and lumbar spine, an accelerated pulse, great heat and dryness of the cutaneous surface, coated tongue, some dysphagia, and constriction and rigidity of the muscles of the neck. She evidently was a victim to malarial poison, for which I ordered

℞. Quiniæ sulphatis, ... ʒ ss;
Acidi sulph. aromat., . . . ʒ i ss;
Spts. ætheris nitrosi, . . . ʒ ij,
Aquæ camphoræ, ... ℥ v ss.
M. S. Table-spoonful every two hours.

Quinine having been clearly proven to be a potent sedative, the above compound had the desired remedial effect in arresting the frequency of the pulse, altering the condition of the skin, and more particularly in alleviating her intense agony.

On my second visit I found her complaining so bitterly of the rigidity of the cervical muscles that I ordered the topical use of the officinal *linimentum camphoræ*, warmed, and directed the administration of a dose of ol. ricini. I increased the dose of each of the medicines ordered previously, viz.:

℞. Quiniæ sulph., ... ʒ ij;
Acidi sulph. aromat., . . . ʒ ij;
Spts. ætheris nitrosi, . . . ℥ ss;
Aquæ camphoræ, ... ℥ v.
M. S. Table-spoonful every three hours.

There supervened a rapid subsidence of the symptoms upon taking the above. The family asked me to discontinue my visits until her condition should necessitate my services, which were needed on the 29th instant. I found her condition much aggravated, with well-developed opisthotonos, photophobia, delirium, dysphagia, increased heat and dryness of skin, attended with spasmodic transmissions of nerve influence, nervous twitchings, tremulous tongue, and excessive hyperæsthesia and irritability, for which I ordered the following, viz.:

℞. Chloral. hydrat., ... ʒ iv;
Potassii bromidi, ... ʒ ij;
Syrupi zingiberis, ... } āā ℥ ij.
Aq. menth. pip., ... }
M. S. Table-spoonful every three hours.

The combined symptoms were alleviated by the above. On March 1st (next day) another paroxysm (febrile) manifested itself, whereupon I discontinued chloral and gave quinine, as follows:

℞. Quiniæ sulph., ... ʒ ss;
Morph. sulph. syrupi, . . . ℥ ij;
Potassii bromidi, ... ʒ ij;
Aq. menth. pip., ... ℥ iv.
M. S. Table-spoonful every three hours.

Though the fever abated, the opisthotonos continued, when I gave the following, viz.:

℞. Liquoris ammoniæ acetatis, . ℥ ij ss;
Morph. acetatis, ... gr. ij;
Spts. ætheris nitrosi, . . . ℥ ss;
Spts. lav. comp., ... ʒ j;
Aq. camphoræ, ... ℥ iij.
M. S. Dessert-spoonful every three hours.

I also ordered a blister six by four inches to be applied on neck beneath the occipital protuberance. Slight vesication relieved the cervical pain. This blister was re-applied for three days successively for a few minutes each day. One bedsore formed on right nates. A circular pad or ring padded, warm water and castile soap, with local use of ol. ricini, soon healed the wound. I observed that the smallest quantity of beef-tea provoked a return of the tetanic spasms, so she was sustained with farinaceous articles — broth, chicken, and rice-water — and gradually resumed her ordinary regimenal indulgence. She recovered without any symptoms of nerve lesion. Her prostration was extreme, but she soon rallied and was well again; no faculty impaired in any degree whatever.

Case II. A boy, fifteen years of age, an acrobat, came under my observation, with excessive muscular tenderness, with same symptoms as Araminta. The boy was kept on chloral (ten grains at a dose), with quinine in fourteen-grain doses, before accession of fever. His opisthotonos was of an intermittent character, and at the same time better marked. He recovered.

Meningitis seems to be induced by the deleterious influence of malaria, impoverishing the blood or promoting dyscrasia, and ultimating in serous effusions or subacute inflammatory tendency. I deem quinine and morphia, and perhaps chloral, highly indispensable in the treatment of such complications.

New Orleans.

THE CAUSE OF BLINDNESS IN NINETY EYES.

BY DUDLEY S. REYNOLDS, M. D.

In searching for statistical records of the cause of blindness I have been singularly unfortunate. I have now in my possession one or more copies of the annual reports of the several institutions for the blind in the United States, and I find none of them to contain any satisfactory information on this important point.

To say that one is blind does not always mean that the visual power is wholly lost; for, according both to my own observation and the information obtained from the before-mentioned reports, as well as other sources, I find that in institutions for the education of the blind applicants for admission have to show that their vision is so impaired as to prevent their obtaining an education by the use of the visual power. So that by no means all those who are inmates of such institutions are really blind.

Through the kindness of my distinguished friend, Prof. T. S. Bell, President of the Board of Trustees, and Mr. B. B. Huntoon, Superintendent of the Kentucky Institution for the Education of the Blind, I have been permitted to visit and examine the eyes of all the inmates of the institution.

I found forty-five persons, representing ninety eyes. Of this number sixty-four are hopelessly lost. The remaining twenty-six would be more or less improved by operation.

Purulent ophthalmia destroyed twenty-eight of the sixty-four blind eyes—nearly one half. Of those who have lost their vision in both eyes from this cause there are ten. Eight have lost one eye each, with more or less permanent damage to the remaining eye. In most of the eight persons having one eye only partially destroyed iridectomy would restore sufficient vision to enable the subject to go about alone, see

all ordinary objects, and in some sufficient sight to read ordinary type could be obtained.

Irido-choroiditis destroyed twenty eyes in persons who had been the subjects of some one of the eruptive fevers or congenital syphilis. (Four eyes, two cases.)

Accidents, as penetrating wounds, caustic substances, etc., destroyed nine eyes in five persons.

Atrophy of the optic nerve was the cause of blindness in six eyes in five persons.

Sympathetic ophthalmia was the cause of blindness in one eye only.

Congenital cataract deprived six eyes in three persons of the power of vision.

Entropion, with slight superficial ulceration of the corneæ, was the cause of blindness in two cases (four eyes).

Chronic choroiditis impaired two eyes in one person.

RECAPITULATION.

TOTALLY BLIND OR BEYOND HOPE OF IMPROVEMENT.

Cause.	Persons.	No. of eyes.
Purulent ophthalmia,	18	28
Irido-choroiditis,	10	20
Accidents,	5	9
Atrophy of optic nerve,	5	6
Sympathetic ophthalmia,	1	1
	39	64
MIGHT BE CURED OR GREATLY IMPROVED BY OPERATION, ETC.		
Congenital cataract,	3	6
Entropion,	2	4
Choroiditis (chronic),	1	2
Total persons,	45	
Eyes impaired by central opacity of cornea from perforation by wound or ulcer,		14
Total number of eyes,		90

The fact that twenty-six eyes out of ninety might be improved, and that at least twenty-eight that are now hopelessly

lost might have been saved by timely treatment, is a strong plea for specialism in medicine.

I am satisfied that the result of carefully-conducted investigations of the causes of blindness on a more extensive scale would make little change in the above figures as to the relative proportion of the various causes. Then, if I am not mistaken in my estimate, it is perfectly certain that the long-established method of treating purulent ophthalmia is extremely unsatisfactory, and the sooner the traditional nitrate of silver is cast aside the better.

There is no excuse for allowing an eye to be sacrificed to a disease that may be so promptly arrested as *purulent conjunctivitis.* Mild astringents and anodynes very frequently applied, almost constantly clearing away the secretion with warm water, and with the occurrence of the slightest haziness or ulceration of the cornea free and frequent evacuation of the aqueous humor, will insure the salvation of nearly every eye so affected.

LOUISVILLE.

EPILEPSY TREATED BY BROMIDE OF POTASSIUM AND SULPHATE OF ATROPIA.*

BY DAVID W. YANDELL, M. D.

Any interest which may attach to the cases that I am about to report will be due rather to the length of time during which they have been observed than to any novelty in the treatment pursued. One case has been under observation for nearly eight years. Another has been seen almost daily for seven years, while no case has been reported which

*The majority of the cases reported in this paper came under my care while I occupied the chair of the Principles and Practice of Medicine in the University of Louisville.

has been under my care for less than three years. The several forms of epilepsy are represented in the group as follows: epilepsia gravior, eleven; epilepsia mitior, one; epilepsia abortiva, one. These several terms are now so generally understood by the profession that I need not do more than mention them here.

Case I. (Ep. grav.) Aged thirty-five; had his first epileptic seizure at the age of sixteen, his second three months after. The attacks slowly increased in frequency. He was treated with many drugs, among others with nitrate of silver, which he used so long and persistently that his skin became of a deep-blue color. He derived benefit from nothing that he took. In July, 1865, his attacks occurred about once in seven days. They were not always of the graver form, but sometimes belonged to the lighter variety; and usually occurred in the day-time, though sometimes at night. They were preceded by a sleepless night or two, accompanied by much depression of spirits.

He was put upon twenty-grain doses of the bromide of potassium three times a day, followed by the hundredth part of a grain of the sulphate of atropia at bed-time. In seven days the dose of the bromide was increased to thirty grains. His nights became more quiet, but the attacks were not averted. At the expiration of seven other days the quantity of the bromide was raised to forty-five grains, and an additional dose of atropia given in the morning on rising. He now went two weeks without a seizure, and when it came it was of diminished violence. The atropia having produced marked dilatation of the pupils and dryness of the throat, the morning dose was discontinued. He now went a month without an attack, and thought it would not have then occurred but for his having over-exerted himself. The paroxysm was very severe. The bromide was now given in sixty-grain doses, and the atropia omitted altogether. The patient thought he was more nervous than before, and the atropia was resumed

with the effect of diminishing the nervousness. As a therapeutic experiment the atropia was again omitted, and resumed with the effect just noted. From that time the two medicines were given continuously for six months, during which period the patient had but one attack, and that a light one. The bromide now seemed to disagree with him, and without any actual symptoms of bromism the medicine became exceedingly repugnant to him. Although it was suspended, and an attempt made to resume it in diminished doses, his aversion to it was not overcome. He had two attacks, both light, within three weeks. A medical friend having suggested the bromide of sodium, he took this in thirty-grain doses, with the effect of preventing a recurrence of his disease. He continued its use throughout the greater part of the year, then omitted it for some months; when, being alarmed by inability to sleep and depression of spirits—prodromes of former seizures—he again resorted to the medicine, and took it for the greater part of another year, at the end of which time he abandoned it altogether. He has not had another attack.

Case II. (Ep. grav.) A delicate young lady, aged seventeen, had occasional seizures, usually at night, for three years. She would remain in bed in a heavy, sleepy, or listless state for twenty-four hours after an attack. No connection could be traced between her catamenia and the epilepsy. Eating late and heavy suppers seemed on more than one occasion to act as the exciting cause. Her attacks now came on at least once a month, and on several occasions, after indiscretions in eating, they had occurred as often as once a week. She was ordered twenty grains of the bromide three times a day, the last dose to be followed by the hundredth part of a grain of sulphate of atropia. She was required to observe early hours for retiring, and to avoid heavy suppers. Ninety days passed without an attack, when a seizure followed after attending a party where she both ate and danced to excess. Thirty grains of the bromide were now given at a dose, and

two doses daily of the atropia; one on rising, the other on going to bed. Within two weeks it became necessary, as in Case I., to omit one dose of the atropia. The medicines were now continued, with but an occasional intermission, for fifteen months, during which time she had no attacks. While on a visit to some friends in a neighboring city she indulged to excess in fashionable dissipation, with the result of developing two light seizures at an interval of seven days. On her return home she resumed the medicines, and took them without intermission for eighteen months. She has had no other attacks.

Case III. (Ep. grav.) A robust farmer, aged twenty-two, had been subject to epilepsy for six years. His first attack occurred while in the harvest-field, and was thought to be sunstroke. His second came on at night, after having eaten abundantly of unripe fruit. From that time his attacks occurred with considerable regularity, about once in two months, for a period of nearly four years. Severe work in the hot sun would make them more frequent. For two years past he has not ridden on horseback for fear of a seizure, having once fallen from his horse into a creek; nor has he been able to do farm-work in the summer months. The same course pursued as in Case II. enabled him to write, six months after it was begun: "I have had no severe attack, and but two slight ones, since I commenced the medicines. I was not aware of having had one of these. It occurred early in the night, after a heavy supper, and I was told of it by my mother." A year afterward, during which time he had taken his medicines with considerable regularity, he wrote that he considered himself cured. Having heard nothing from him now for four years, I infer that he has continued well.

Case IV. (Ep. grav.) A delicate-looking merchant from the lower part of the state has been the subject of epilepsy from his eighth year. He ascribed his first seizure to sudden fright. For several years his attacks were mostly in the night.

From the age of twelve to sixteen he was prevented from going to school by reason of his disease. From sixteen to twenty he grew better, without any reason that he could assign, and thought himself almost well. He now had protracted typhoid fever, after recovering from which the epilepsy returned with all its former violence. He was treated by a number of physicians, but without benefit. His attacks were preceded by an aura, beginning in the epigastrium, which was so prolonged in some instances as to allow time for him to inhale chloroform in sufficient quantities to avert the paroxysm. The bromide and atropia sensibly diminished the violence of an attack which occurred in fourteen days after beginning their use. At the end of three months the seizures became exceedingly slight, the aura disappeared, and eighteen months after commencing the treatment he wrote: "I have been free of my complaint for at least six months; indeed I am not sure that I have had an attack for twelve months. I take one dose of thirty grains of the bromide daily. I use the atropia only when I feel nervous; when my hand trembles, for instance. I think it does me good."

Case V. (Ep. grav.) A young man, twenty-two years of age, epileptic from his youth, had seizures for the past two years weekly, sometimes daily; could not be left alone. The bromide, though exhibited in very large doses, produced no sensible effect, and the patient died one night in a fit.

Case VI. (Ep. grav.) A man, aged nineteen, a farmer, from Tennessee, had several severe epileptic attacks when in his thirteenth year. A course of purgative medicine, with strict attention to his diet and avoidance of exposure to the sun, which during the summer months always gave him pain in the head, prevented further seizures for four years. A change in his family circumstances made it necessary at this time to engage in farm-work, which he commenced in the spring. The following summer, while gathering fodder on a very hot day, he fell down in a fit. The attack was thought to be

sunstroke; but as another and more violent seizure occurred three days after, he was made aware that his old enemy had returned. He had treatment from several physicians, but without sensible effect upon his disease, paroxysms of which continued to recur at intervals of about a month. During the colder months he was able to engage in work on his farm; but with the return of summer he found that exposure to the sun brought his old headaches back, and with them in a short time his old seizures. The bromide of potassium was now given him by his family physician, in ten-grain doses, three times a day, with the effect of relieving his headache, but without lessening either the severity or frequency of his fits, which during the summer solstice occurred once a fortnight, and oftener if he was much exposed to the sun. When the weather became cold his seizures occurred but once a month. The next summer, at which time I saw him, his attacks came on once in three, sometimes once in two weeks. Under thirty-grain doses of the bromide three times a day, and the atropia at bed-time, his headaches, from which he was suffering the greater part of every day, disappeared at once; and the next seizure was postponed thirty-one days, a longer interval than had occurred between any paroxysms for several summers. He ascribed this seizure to having gorged himself one very hot day with melons. The dose of the bromide was raised to forty-five grains. In a letter received from him the following Christmas he says: "I have had one or two severe headaches since I increased the medicine, and think that on at least two occasions I must have lost consciousness for a moment or two; but I have had none of my old fits." He continued the treatment throughout the next summer, and wrote in the fall that he found himself still obliged to avoid protracted exposure to the sun in order to escape his headaches, but he had no other epileptic seizures.

Case VII. (Ep. grav.) A lad from Indiana, aged seventeen, living in the country, well-grown and otherwise healthy, had

been the subject of epilepsy for three years. His mother reported that he had had during his first dentition very many convulsions, and up to the age of ten years had occasional fits after eating indigestible food. For four years his health had been perfect, when one day, while worrying with an unbroken horse in the hot sun, he had a fit. Another recurred in six weeks. His physician ordered him the bromide of potassium, in doses of fifteen grains, three times a day, but without appreciable benefit; his seizures coming on with great regularity once in six to eight weeks, and oftener if he overeat, particularly at supper; sometimes at night, though most frequently in the day-time. Six months of the bromide, in thirty-grain doses, and sulphate of atropia, converted his disease into the milder form, and twelve other months effected a cure.

Case VIII. (Ep. grav.) A paper-carrier, aged thirty-two, the subject of epilepsy from early youth, seldom went longer than three months without a seizure, and occasionally had one as often as once a fortnight. One attack was sometimes followed by a second in two days. If standing, he always fell during his fit, with the effect on a number of occasions of dislocating his humerus into the axilla. The first and second times that I saw him I was called for the purpose of reducing the dislocation. He has now been taking the bromide (in thirty, forty-five, and sixty-grain doses, three times a day) for well-nigh two years, during the whole of which period he has escaped every form of epileptic seizure.

Case IX. (Ep. grav.) A painter fell a considerable height, from a ladder, on his head. He was picked up insensible, and a marked depression of his skull found on the vertex immediately over the longitudinal sinus. On his return to consciousness he was paralyzed on one side. The paralysis slowly diminished, but was succeeded by violent epileptic convulsions. The patient was now sent to me by my friend, the late lamented Dr. Rodman, that he might, if necessary, be trephined. The convulsions were both frequent and severe

The patient had constant headache, and slight paralysis still remained. The depression of the skull was three quarters of an inch in diameter, well marked, and situated immediately over the superior longitudinal sinus. While debating the propriety, because of its situation, of an attempt to remove the depressed bone, the patient was put upon thirty-grain doses of the bromide of potassium three times a day, under which his improvement was so rapid that all thought of the trephine was soon abandoned. The epilepsy was entirely cured. The hemiplegia continued, but in so slight degree that he was able to resume work.

Case X. (Ep. grav.) A boy of sixteen, brother of Case V., small but very robust, fell senseless one sultry day in the summer, and was thought to have sun-stroke. He was much depressed by the attack, and looked so feeble after it that I gave him quinine. In a little while he had a second seizure as violent as the first, and the supposed sun-stroke turned out to be epilepsy. His attacks were sometimes slight, but generally severe. They occurred fortnightly, sometimes weekly, especially when much exposed to the sun. Twenty grains of the bromide, then increased to thirty, three times a day, with the sulphate of atropia at night, first converted the *grave* into the *lighter* paroxysms, and then reduced the frequency of the latter to once in two or three months. The patient was sent to the country in the autumn, and led until the following spring an active, outdoor life, with the effect of improving his general health in very marked degree. He still, however, continued to have an occasional seizure. Sometimes it would be in the form of a slight and exceedingly transient giddiness, sometimes as a severe headache; and though it at no time assumed the shape of the earlier paroxysms, he was still painfully alive to his condition. He then, as is advised by Voisin, began "almost to live on the bromide;" and in a few months considered himself sufficiently restored to warrant his engaging in business as a clerk, a position which he fills

up to this time, his disease being seemingly kept at bay, if not altogether overcome. He still continues to take the medicines a part of every month, and leads in every sense a temperate life. The patient is confident that he is better with than without the atropia, the medicine seeming to have much control over his nervousness, which invariably grows worse when the drug is suspended.*

Case XI. (Ep. grav.) A lady from Illinois, the mother of several children, had been a confirmed epileptic from early girlhood. Her attacks seldom occurred oftener than once in two months, but were of extreme violence and very protracted. The bromide in thirty, then forty, and finally in eighty-grain doses, three times daily, with the atropia at night, changed the disease into the milder form; but, though the medicines were continued for more than twelve months, the seizures returned with their accustomed regularity. The patient considered herself greatly benefited, but not cured. She was advised to increase the quantity of the bromide, since which time she has not been heard from.

Case XII. (Ep. mit.) A girl, aged sixteen, had her first attack of epilepsy when she was twelve years old, her second three months after; and, from that time until I saw her, her seizures were never longer than ninety days apart, oftentimes but thirty, and occasionally only fourteen days. They were preceded by exaltation of spirits, and followed by extreme wretchedness and depression. No cause could be assigned for her disease. She began the medicines as in Case II. The expiration of a month found her no better. The dose of the bromide was raised to forty-five grains, and the atropia given twice in twenty-four hours. She bore the latter medicine for three weeks, when, as in the previous cases, it became necessary to return to but one dose a day. The attacks were

* In this case a distinct aura, beginning in the hand, preceded the attacks for such a time that the patient was frequently able to inhale sufficient chloroform to avert the paroxysm. He says a few whiffs of the anæsthetic are sufficient to ward it off.

evidently milder, but were more frequent. This latter circumstance she attributed to the excessive heat of the weather, close confinement in a small kitchen, and overwork at a cooking-stove. The dose of the bromide was increased to sixty grains, with the effect of reducing the seizures to mere momentary loss of consciousness, oftentimes so slight as to be scarcely appreciable. The bromide was now given in doses of ninety grains, and continued for four months; then reduced to sixty grains for four months, then to thirty grains for four months, then given in half-drachm doses for fifteen days in a month for twelve months, and then abandoned. She had no attacks of any kind after taking ninety grains at a dose, and has remained well ever since.

Case XIII. (Ep. abort.) A lad, aged eighteen years, tall, slender, and delicate-looking, had suffered from convulsive seizures during the period of his first dentition, and had several attacks from his fifth to his eighth year, caused in every instance, it was believed, by gorging on unripe fruit, once by stuffing on orange-peel. From the latter date until his sixteenth year he was free from convulsions, though very excitable and nervous. He was now observed to have one or two convulsions resembling an ordinary epileptic paroxysm, though he preserved his consciousness during the seizures, and denied having been attacked. The paroxysms occurred at gradually lessened intervals until I saw him, when they came on pretty regularly once in three weeks. In some of them the patient completely lost consciousness; in others he preserved it. He was guilty of onanism, and his general health was much deranged. A few weeks of treatment improved the latter, and good counsel induced him to abandon the former. He now began the bromide in twenty-grain doses, three times daily, and took the atropia at bed-time. In less than three weeks he had a slight seizure while excited at a game of ball. The dose of the bromide was increased to thirty grains, and the atropia given night and morning.

His next attack was postponed for seven weeks, a longer time than he had gone without a paroxysm for fifteen months. The atropia having produced some discomfort was omitted altogether for a couple of weeks, when the patient becoming more nervous and excitable than while taking it, he was directed to resume the bed-time dose, and the dose of the bromide was raised to forty-five grains. He had a slight seizure at the expiration of three months, due, I had reason to believe, to his having indulged in his former filthy practice. He was now sent to a hydropathic establishment, from which he returned at the end of four months wonderfully improved in general health, having taken his medicines regularly in the *interim*, and having but one very light paroxysm. The following winter he spent in Florida hunting and fishing, and taking his bromide not, as he admitted, with perfect regularity, but averaging fifteen to twenty days in every month. In the spring he engaged in business, and considered himself rid of his old enemy, though he continued to suffer at times with nervousness. He remained free of epilepsy at least for eighteen months, when he was unfortunately drowned one day while crossing an arm of the sea.

In none of the above cases did the bromide produce any unpleasant symptoms further than in one or two instances an acne, which soon disappeared on the drug being suspended. The largest dose given for any length of time was ninety grains, though in two instances as much as two drachms were given at a time for several successive days. I have thought that if, as has been asserted, syphilis establishes a tolerance on the part of the system of the *iodide* of potassium, epilepsy must do the same in respect of the *bromide* of potassium; for it certainly was a matter of astonishment to see how little disturbance of the general system even the largest-named doses of the medicine produced. Yet, for all this, I am not inclined to follow Voisin* in the heroic doses of the salt

* *Vide* American Practitioner, November, 1871, page 286.

which he often gives. In my own experience I have not found them necessary; nor did I regulate the size of the dose by Voisin's test of the effect of the remedy on the sensibility of the epiglottis. I seldom indeed attempted to ascertain whether or not there was anæsthesia of the fauces. The medicine was given generally a few moments after meals, and usually in water, occasionally in a simple elixir. Diuretics were administered regularly in every case. Purgatives and some of the preparations of iron were found necessary in the large majority. Attention to hygiene, as strict as their surroundings would allow, was enjoined on all, and those cases did best which conformed most closely to the rules laid down for their government. What part the atropia played in the cure it is perhaps impossible to say. It certainly seemed to exert a salutary influence on several of the cases. It is, I think, noticeable how small a quantity of the drug induced its characteristic effects.

LOUISVILLE.

THE HYPODERMIC USE OF ERGOTINE.

BY F. C. CURTIS, M. D.

Cases attended with excessive loss of blood are the greatest source of anxiety to every physician, especially when the hemorrhage is from internal organs. To check these discharges quickly is often a matter of vital importance. Ergotine thrown directly into the circulation has claimed much attention of late, and the following cases and remarks are submitted as an addition to the experience of others. They seem to establish the value of it, or allied preparations of ergot, used hypodermically, although in some cases followed by unpleasant results.

At a recent meeting of the Albany County Medical Society

a paper by Dr. J. B. Stonehouse, jr., of Flushing, Long Island, was read, in which five cases of hemorrhage treated with this drug are detailed. He says:

"About a year ago I became interested, from statements in foreign and domestic journals, in the alleged hæmostatic properties of ergotine. Procuring a quantity of the material I determined to test it as far as my practice permitted. The solution used was in the proportion of half a drachm of ergotine to the drachm of water. The following cases are offered in the hope that they will encourage others to give it a trial, and thus lead to the more extended use which I believe it deserves.

"Case I. W. R., aged thirty-nine, colored, a farm hand, married. His father, two brothers, and two children died of phthisis. Previous health apparently good, with the exception of an occasional slight cough and pain at different points on the chest. About noon, while expending some force in trying to remove a bowlder from a field, he was seized with an attack of coughing, accompanied by faintness and profuse ejection of blood from the mouth. This lasted for some time, gradually decreasing. About an hour after the first attack a second and similar one was excited by an attempt to remove his boots. When I saw him (within an hour) the hemorrhage had ceased, but before I left the house a third attack was brought on by coughing. I injected by hypodermic syringe eight drops of the above solution and left him, enjoining extreme quiet. The next morning, although there had been no other attack, I injected eight drops more, and prescribed an anodyne to allay cough and insure quiet. Three months afterward the man had had no return of the hemoptysis. On the third day after the injection a small tumor, hard and dark-colored, appeared on the site of the operation. This disappeared during the succeeding week.

"Case II. A lady of tuberculous antecedents, aged twenty-one, consulted me concerning an hemoptysis occurring (for a

month past) generally upon retiring for the night, although sometimes happening during the morning. I injected eight drops of ergotine immediately, and prescribed

℞. Syr. scillæ, ... } āā ℥ j;
Syr. tolut., ... }
Morphiæ sulph., . . . gr. j.
M. S. One drachm every four hours.

The injection was continued every week for a month with no return of hemorrhage to this day. Fortunately I have been able to watch this case almost every day since the first injection, a period of six months.

"Case III. A lady, aged thirty-four, the mother of two children, aged respectively eight and ten. For two months before I was acquainted with the case she had every week profuse and painful uterine hemorrhage, lasting for one or two days. At my first visit, February 10, 1871, the patient's weight was about one hundred and forty pounds. She was pale and even cadaverous in appearance; pulse slow, feeble, and intermittent. She sleeps during the day, and at night is restless. The flow commences on Friday or Saturday, and lasts till Sunday or Monday morning, existing to a slight degree during the interval. Uterine walls (distinguishable through the abdominal parietes) flabby; os dilated and flabby. Ordered

℞. Quiniæ sulph., ... gr. xxxij;
Tr. ferri mur., ... *m* lxxx;
Syr. zingiberis et aquæ, q. s. ad., ℥ ij.
M. S. One drachm every four hours.

Anodyne at ten P. M.; beef-tea, milk punch, etc. Made an injection on the evening of the 11th, the hemorrhage being expected on the 12th or 13th. A slight appearance on the 13th. Continued the injections twice a week, immediately after and before the hemorrhagic attacks. The flow did not appear on the 19th and 20th; no return until the 27th, since which time the menstrual periods have been regular in quantity and duration. The last injection was made on the 21st,

making four in all. The amount used in each instance was ten drops of the above solution. The patient rapidly gained strength and flesh, and now is in possession of perfect health. This case to me is very interesting on account of the extreme debility of the patient, consequent upon the profuse hemorrhage, the speedy and efficient result of the use of the drug, and the complete and satisfactory recovery of the patient.

"CASE IV. A middle-aged woman, the mother of several children, was delivered, as on previous occasions, with instruments. The delivery was followed by an almost unmanageable hemorrhage. In this case the ergotine was given a fair trial, as was also every other preparation of ergot, from the powder to the fluid extract of Squibb, with no satisfactory result. The hemorrhage was at last controlled by kneading, and by this only after long and exhausting efforts. The child was still-born. This is the only failure which I have experienced in the use of ergotine.

"CASE V. A man, aged twenty-nine, has had symptoms of secondary syphilis. He was attacked with hemorrhage, which from the circumstances I believed to be renal in its origin. It was speedily relieved by hypodermic injections of ergotine over the region of the kidneys.

"I regret exceedingly that I have been unable to recall a few other cases which have been quite decided in their lessons; but having made no notes of them at the time, the particulars which would make them of value in this respect are wanting."

Dr. Stonehouse writes me that abscesses did not occur in any of his cases. In one or two a black swelling as large as a small pea was left after the insertion; but this disappeared in a few days, occasioning no unpleasant symptoms. In this his experience does not tally with that of Dr. Wey, detailed below. Dr. J. P. Boyd, jr., says that he saw it used three times a day in a case of uterine fibroid, at Breslau, by Dr.

Freund, *privat docent*, without the occurrence of abscesses. It seems to me, however, a matter of small moment whether they occur or not, if the flow of blood in profuse hemorrhages is stopped and life saved.

The subject of the hypodermic use of ergotine was discussed at the late meeting of the New York State Medical Society. Dr. Wm. C. Wey, of Elmira, gave his experience as follows:

"In a case of uterine fibroids of many years' standing, which had attained such size as to press upon the rectum, producing mechanical occlusion of the bowel, and causing the patient to have excessive hemorrhages, I commenced the injection in the arm of a solution of ergotine, which after six trials was abandoned because of its powerful local and irritant effect. I then used Squibb's fluid extract in the abdominal wall, beginning with ten drops, and increasing gradually every day up to twenty and twenty-five drops. In consequence of the pain attending this operation I combined Magendie's solution of morphia with each dose. Conscious that there was an incompatibility in the use of these articles, I wrote to Dr. Squibb on the subject, and received from him the assurance that they were incompatible, and should not be used in combination, for the reason that all the proper effects of ergot were antidoted by the effects of the morphine. Dr. Squibb at the same time sent me a watery extract of ergot, which he said had properties for this purpose superior to the fluid extract, and which was also of greatly increased strength. This preparation I used, beginning with ten drops, through the skin of the abdomen; and gradually increased until fifteen, twenty, and thirty drops were daily injected. Local irritation followed this, as well as from the use of the fluid extract, and abscesses were produced. In the course of a short time I opened eight quite large abscesses upon the abdomen, which discharged exceedingly offensive pus. Subsequently, abandoning the hypodermic injection because of the local disturb-

ance, I used the watery extract of ergot, beginning with sixty and gradually increasing to eighty drops each day, placed on a pledget of cotton in the vagina, and retained *in situ* by a large packing of the same material. Later Dr. Squibb sent me suppositories of ergot, one form made with gelatine and another with suet, each representing as much as eighty drops of the watery extract. These are still in use. The more solid extract for hypodermic injection, when diluted, or for use by the stomach, rectum, or vagina, has not been employed.

"Now let me speak of the effects of this plan of treatment. The tumor was diminished in the course of six weeks fully one third in size; the indurated cervix had softened, no longer pressing on the rectum; the bowels moved spontaneously and regularly; hemorrhage ceased; menstruation lasted half as long as before, with less than half the discharge of blood, and the general health of the patient has visibly improved. From four to six hours after the use of ergot by the skin or vagina a tendency to sleep comes over the patient, which is quite irresistible. The toxical effects of ergot have never been positively perceived."

Dr. B. F. Sherman, of Ogdensburg, also reported a case of uterine fibroid which was treated by the hypodermic use of ergot to the great improvement of the symptoms and the general health of the patient. He used Squibb's extract diluted with glycerine.

Dr. Squibb, of Brooklyn, remarked that ergot, unlike opium, aconite, etc., has no single active principle, and that preparation of it is best which most perfectly represents the whole drug. The ergotines which have been most commonly sold differ, and no one of them can be considered to fairly represent the drug. An evidence of their want of uniformity is seen in the difference in dose; that of some being given as one sixteenth of a grain, while other substances of the same name are directed in two or more grain doses.

It should always be remembered that chemistry is as

destructive when applied to some drugs as it is advantageous to others. The difficulty is to draw the line where this splitting up by means of chemistry is an advantage. Ergot in substance is perishable; and its preparations, if not guarded in some manner, must partake of this tendency to deteriorate. The officinal fluid extract represents the ergot as well as any preparation that has been made, and specimens used after several years' keeping have proved as effective as when freshly made. It is, however, better adapted to the ordinary parturient uses of ergot than to cases where patients have to take it for a long period; for in such cases it is liable to produce anorexia, and the patient will run down during its administration. For this among other reasons Langenbeck, Hildebrandt, and others have sought to use it hypodermically, and have produced its specific effects in this way. The officinal fluid extract has been thus used very frequently, and occasionally with moderate success; but the alcohol and a little free acetic acid render it irritant and more likely to produce abscesses. It has seemed desirable therefore to get a preparation as little irritant as possible. This object has seemed to be attained by making a solid extract soluble in water alone, which also has not the nauseous taste when taken by the stomach. I have succeeded in preparing this by simply evaporating the fluid extract at a low temperature. Heat is very destructive to the activity of ergot, and has been the principal thing in the way of most of its preparations. If a cold-made fluid extract be evaporated at a temperature not much exceeding the atmospheric range, a solid extract can be made which represents the drug in the proportion of one grain to six. This taken in pillular form is not nauseating, and will not disturb the stomach. A filtered solution can easily be made, each minim of which may represent either one or two grains of ergot, and this solution is as well adapted to hypodermic use as any yet devised. It should be remembered, however, that all solutions which well represent ergot

are so loaded with organic matter that they are liable occasionally to cause abscesses when introduced under the skin.

Some authorities regard all preparations of ergot as inapplicable to hypodermic use; others have used many different preparations with only occasional abscesses, while Dr. Wey has obtained its specific effects by application to the mucous surface of the vagina by suppositories. This testimony indicates that it may be used in either way, and may be wisely used in all; that is, after the stomach fails to receive it kindly, it may be intermitted for a week or two without material loss of effect, and then resumed by hypodermic injection until abscesses follow. After another period of rest it may be resumed by suppositories in the vagina; and when these, or pledgets bearing the solution, produce local irritation and perhaps leucorrhœa, another period of rest will enable the practitioner to return to the stomach.

Toxic effects of ergot, which have been feared from its prolonged use, do not seem to have been met with by those who have used the drug longest and in largest quantities. Still the physician should always be on the watch when giving ergot continuously, and be prepared to intermit its use either for the stomach's sake, or to avoid poisonous effects when its disadvantages become apparent.

ALBANY, N. Y.

Reviews.

Illustrations of the Influence of the Mind upon the Body in Health and Disease. By Daniel Hack Tuke, M. D., M. R. C. P., etc. Philadelphia: Henry C. Lea. 1873.

The author of this entertaining and instructive volume adopts as his motto the remark of John Hunter, that "there is not a natural action in the body, whether involuntary or voluntary, that may not be influenced by the peculiar state of the mind at the time." The truth of the remark is abundantly attested by the experience of every man of observation, and physicians especially recognize the force of this mental influence. How far it is concerned in many of the morbid actions, as well as in many of the therapeutic effects, which we witness daily in our practice, has never yet been determined; but that this influence of the mind is a factor in many of these results can not be regarded as a matter of doubt, and hence the subject is one which must awaken inquiry in the mind of every medical man.

No question in biology has ever created a deeper interest than the connection between our material frame and the conscious, thinking principle within. That this active principle exerts a powerful therapeutic influence over morbid conditions of the body is indeed a doctrine of an ancient date. An old English physician laid it down, many centuries ago, that one of the things necessary to a cure is that the patient have confidence in medicine. The sick man, he maintained, "must be of good cheer, and have sure hope that his physician can help him." But long ere this was insisted upon by the British physician, Galen had taught that "confidence

and hope do more good than physic;" and wonderful stories of this healing power of faith are also told by Greek writers. It is related of one Axiochus, for example, that when his disease had resisted all the remedies of his physicians, and he had been brought near the jaws of death, he was at last restored to health by the sight of Hippocrates. Paracelsus insisted, in fact, that it was in this way that the father of medicine effected all his cures. He would not allow that it was possible for Hippocrates to accomplish any thing in the absence of his chemical remedies. He could only have made cures, said Paracelsus, by exciting the hopes of men; "for the common people," he adds, "had a most strong conceit of his worth." Physicians in all times have recognized this principle, and nothing is better understood than that the practitioner who inspires most confidence will, other things being equal, practice with the greatest success.

To the *vis medicatrix naturæ* we all admit that we are chiefly indebted for the cure of disease—of those forms of it, at least, that tend to a favorable result; and we can not in any way so strengthen that curative force as by inspiring hope and confidence in our patients. But if such be the restorative power of the cheerful emotions, there can be little doubt that the opposite influence is exerted by the depressing feelings. Grief, melancholy, anxiety of mind, and all that class of affections rank among the agencies which induce or aggravate bodily disorder.

To illustrate this influence, so long recognized, of the mind over our corporeal functions, in both a healthy and morbid way, is the object of Dr. Tuke in the work before us. It is but justice to the author to say that he has executed the task he assumed in a manner that leaves little to be added to his labors. He has collected into his volume all the most striking examples of this mental agency to be found scattered through the numberless works which have alluded to the subject, and presents them in a classified form. He shows first the influ-

ence of the intellect, and then, in successive parts, that of the emotions and the passions upon the functions of the body, voluntary and involuntary, animal and vegetative; to which he adds many striking examples of the influence of the mind over the body in the cure of disease.

It has been the fashion of medical men, as well as of the people, to attribute the effects of this character to the power of the imagination; as if the morbid actions induced by states of the mind, and cures brought about by inert remedies, were imaginary. In the same way some nervous diseases are loosely referred to as existing in the imagination, and to be cured by ridicule. Hypochondria, hysteria, and the milder forms of mental insanity have too often been regarded in that light. The medical man has come now to understand that all such affections have their origin in real morbid conditions of the nervous system. When therefore we speak of imagination as curing or causing disease, the meaning is that strong feeling or expectation induces palpable changes in the body; that when a patient vomits or is purged after taking a bread-pill, under the impression that he is swallowing a powerful emetic or cathartic, the mind effects the physiological changes that would have resulted from the action of drugs. This principle of "expectant attention" is at the bottom of many very curious phenomena connected with the human body, and may be brought to bear with great advantage upon the subjects of nearly every character of disease.

One of the most interesting points discussed by Dr. Tuke is the influence of mental work upon longevity. The instances collected render it clear that study seldom induces paralysis, while passion is a frequent cause of it, as well as of sudden death in affections of the heart. Natural philosophers, as a class, attain to the greatest age, and poets are at the bottom. Of poets, those who were, like Wordsworth, of a contemplative turn of mind, lived longer than those who, like Collins, Byron, and Burns, were occupied with themes that elicit intense feel-

ing. Sir Isaac Newton, with all his severe application of mind, lived to extreme old age, while John Hunter was carried off, by a sudden fit of anger, at the age of sixty-five.

The influence of mere mental states over muscular movements and sensations is exemplified by the phenomena which are usually referred to mesmerism or electro-biology, a condition of the system in which the "subject" is deprived of feeling, or feels, sees, hears, and tastes all that is suggested to him by the operator—in which "a man may hold fire in his hand by thinking on the frosty Caucasus," or

> "Wallow naked in December snow
> By thinking on fantastic summer heat."

For a long time these facts were utterly discredited by the medical profession. Men were slow to believe that sensibility could be annulled or strong sensation excited by an operation of the mind. These facts are doubted no longer; but it has been fully established that no such force as mesmerism or animal magnetism or the odylic force is concerned in them. John Hunter had observed that he could fix his attention on any part of his body until he would experience a sensation in that part. In the so-called mesmeric condition the will of the individual is suspended, and he accepts whatever is suggested to him by the person who has his attention. Attention directed to the stomach causes a sensation of weight, aggravating or even originating dyspepsia.

The senses may all be imposed upon in the natural state by the imagination. Thus, an old lady was made sick by the sight of a stove in a church which contained no fire, having often been affected by a heated stove; and the case of the coroner who perceived the odor of decomposition in an empty coffin, supposed to contain the body of a murdered infant, is known to most readers. Soon after the discovery of potassium, by Davy, Dr. Pearson happened in his laboratory, and on a piece of the new metal being placed in his fingers the

doctor exclaimed, "How heavy!" and was only undeceived by seeing the globule float when thrown upon water.

We have alluded to the sudden death of John Hunter from disease of the heart. As every thing that concerns that remarkable man is interesting to the members of the profession which he so greatly enriched by his labors, and as his history moreover illustrates the close relations between the mind and the heart, we quote from Dr. Tuke some particulars of his case as related by himself. Hunter was subject to "spasm of his vital parts" when anxious about any event or excited by anger. "At my country-box," he says, "I have bees, which I am very fond of; and I was once anxious about their swarming, lest it should happen before I set off for town. This brought it on. The cats tease me very much by destroying my tame pheasants, partridges, etc., and rooting up my plants. I saw a large cat sitting at the root of a tree, and was going into the house for a gun, when I became anxious lest she should get away before my return. This likewise brought on a spasm. Other states, when my mind is much more affected, will not bring it on." He could tell an affecting story without experiencing any spasm, but it acted upon his power of articulation. He had to stop often during its relation. The irregular action of his heart was especially liable to occur under the excitement of anger, and he was in the habit of remarking to his friends that his life was "at the mercy of any scoundrel who chooses to put me in a passion." Yet, forewarned as he was of the danger in which he lived from his cardiac trouble, he had not sufficient self-control to avert it. He was one day thrown into a fit of anger by some unexpected contradiction, and expired on the instant.

It would not be easy to limit the influence of the emotions over the muscular system in either the development or cure of disease. Hydrophobia itself, it would seem, may be brought on by fear. Chomel reports a case of a physician at Lyons,

who assisted in the dissecting of several hydrophobic patients, and became alarmed with the apprehension that he had been inoculated with the virus. He lost his appetite, was sleepless, and when he attempted to drink was seized with spasm of the pharynx. In this condition he wandered three days about the streets in a state of despair. At length, however, his friends convinced him that his malady had its seat in his imagination. But other cases have not terminated so favorably. Dr. Tuke cites from the Memoirs of the Royal Society of Montpelier the history of two brothers bitten by a mad dog, one of whom went to Holland and did not return for ten years. On his arrival, learning that his brother had died of hydrophobia, he was attacked with all the symptoms of that disease, and died.

We have spoken of this work as entertaining and instructive. It is both. We have seldom read one with more interest, and we recommend it to our readers with confidence as one which will not disappoint their highest expectations. In concluding our notice of the volume our only regret is that our limits have restricted us to so imperfect an abstract of its contents.

The Pathology, Diagnosis, and Treatment of Diseases of Women, including the Diagnosis of Pregnancy. By GRAILY HEWITT, M. D., etc. Second American from the third London edition. Philadelphia: Lindsay & Blakiston. 1872.

The merits of Dr. Hewitt's work on "Diseases of Women" have been so generally acknowledged by the profession that it is hardly necessary to say a word in commendation of this last edition; and yet we ought to say that it is fuller, clearer, and more valuable than any of its predecessors.

Dr. Hewitt now avows his faith in the "mechanical" system of uterine pathology; an avowal which would especially have delighted the heart of our venerable countryman, Dr. Hugh L. Hodge. But does not the proof of the uncertainty of this

pathology seem conclusive when we find Dr. Chapman, in his "Displacements and Diseases of the Uterus," published about the same time in this country that the third edition of Dr. Hewitt's work appeared in London, discovering its secrets by "congestion," while another declares the revelation is by "mechanics?" Whom shall we believe? The question of the skeptic Pilate comes sadly from our lips, "What is truth?"

T. P.

Clinical Lectures on Various Important Diseases: Being a Collection of the Clinical Lectures delivered in the Medical Wards of Mercy Hospital, Chicago. By NATHAN I. DAVIS, A. M., M. D., Professor of Principles and Practice of Medicine and Clinical Medicine in Chicago Medical College. Edited by FRANK H. DAVIS, M. D. Chicago: J. J. Spalding & Co. 1873.

Readers of the Medical Examiner will recognize in this handsomely-printed volume many of the lectures which appeared in the columns of that periodical during the past few years. The many pupils of the distinguished author will be glad to have his utterances in this permanent form. But the value of the work is by no means limited to this class of readers, for practitioners every where must be interested in the teachings of one who has had so large and so varied an experience as Prof. Davis.

Clinic of the Month.

Dr. Bowditch on Intemperance. — The following is a brief summary of some of the principal points presented in the Third Annual Report of the State Board of Health of Massachusetts: 1. Stimulants are used every where, and at times abused by savage and by civilized man; consequently intoxication occurs all over the globe. 2. This love of stimulants is one of the strongest of human instincts; it can not be annihilated, but may be regulated by reason, by conscience, by education, or by law when it encroaches on the rights of others. 3. Climatic law governs it; the tendency to indulge to intoxication being not only greater as we go from the heat of the equator toward the north, but the character of that intoxication becomes more violent. 4. Intemperance is modified by race, as shown in the different tendencies to intoxication of different peoples. 5. Races are modified physically and morally by the kind of liquor they use, as proved by the examination of the returns from Austria and Switzerland. 6. Beer, native light grape-wines, and ardent spirits should not be classed together, for they produce very different effects on the individual and upon the race. 7. Light German beer and ale can be used even freely without any very apparent injury to the individual, or without causing intoxication; they contain very small percentages of alcohol (4 or 4.5 to 6.50 per cent). Light grape-wines, unfortified by an extra amount of alcohol, can be drunk less freely, but without apparent injury to the race, and with exhilaration

rather than drunkenness. 8. Ardent spirits, unless used very moderately, and with great temperance, and with the determination to omit them as soon as the occasion has passed for their use, are almost always injurions, if continued even moderately for any length of time, for they gradually encroach on the vital powers. If used immoderately, they dwarf intellectually, morally, and physically the nation; cause a beastly narcotism, which makes the victim regardless of all the amenities and even the decencies of life; or perhaps they render him furiously crazy, so that he may murder his best friend. 9. Races may be educated to evil by bad laws or by the introduction of bad habits. England's taste for strong drinks has been fostered by legislation and by wars of nearly two centuries since. France and parts of Switzerland are beginning to suffer from the introduction of absinthe and of schnapps; especially is this noticeable since the late Franco-Prussian war. 10. A race when it emigrates carries its habits with it, and for a time at least those habits may override all climatic law. 11. England has thus overshadowed our *whole* country with its love of strong drinks and with its habits of intoxication, as it has more recently covered Ceylon, parts of the East, and Australia. 12. We should do every thing we can to restrain the use of ardent spirits as a beverage by moral suasion, and, if need be, by stringent law. We should close "grog-shops." 13. Moral suasion and education in the horrors of intemperance, too much neglected of late, . . . should be inculcated. 14. Inebriate asylums should be established by the state for the reformation of dipsomaniacs, and repeated drunkenness should be punished as a crime. 15. The seller of liquor to a known drunkard should be signally punished, and the offender should be made to pay the expenses of crimes or injuries resulting from the intemperance of his victim. 16. All adulterations of liquor should be punished signally and promptly as a high crime against society.

Skim-milk Treatment of Diabetes Mellitus.—Nearly two years ago Dr. Arthur Scott Donkin begun a series of papers in the London Lancet on this subject, which attracted great attention at the time they appeared. In the number of the Lancet for April, 1873, Dr. D. concludes the series with the following interesting remarks;

"I desire to be clearly understood as to what I mean by this term (skim-milk treatment of diabetes). To order the patient to drink as much skim-milk as he can and whenever he chooses, regardless of measure or the time of administration, or to permit him to partake of other kinds of food in addition, even in small quantities, is certainly *not* prescribing the skim-milk treatment. I have known so much as from sixteen to twenty-six pints swallowed daily by the patient, who was thus converted into a species of funnel, through the permission of his medical adviser. Of course it was not at all astonishing that this unmethodical but heroic administration of the remedy was *not* crowned with success.

"By the skim-milk treatment I mean the administration of skim-milk properly prepared, in quantities measured and limited to the requirements of individual cases, given at regular intervals in definite doses, and to the exclusion of all other food for a longer or shorter period. This system of treatment, in short, must be pursued in a strictly methodical manner and according to the rules I have already laid down on this subject, and I must add emphatically *that if this is not done success must not be expected.*

"On account of the scrupulous method, perseverance, and self-denial required, this treatment will never be attended with more than partial success in hospital practice, unless the patients are placed in isolated, special wards, and under the care of strictly trustworthy nurses. Of this I am convinced by my own personal experience in the cases of diabetes I treated in the Sunderland Infirmary. In all of these, without excep-

tion, no sooner was the sugar nearly or entirely removed from the urine than the patients began to indulge clandestinely in the most injurious of the prohibited articles of food, and thus caused a return of the disease. The same observation applies with equal force to the more ignorant and unintelligent of the lower classes treated at their own homes, and to young subjects below the age of maturity. I fully concur with Bouchardat that this cause exercises an important influence over the great mortality occurring among the latter class of patients.

"There can be no doubt whatever that a long holiday with plenty of exercise, under a genial atmosphere, with change of scenery and complete relaxation from business, contributes powerfully to confirm the health of the patient. I am the more anxious to direct attention to this circumstance, having ascertained by experience in similar cases that hygiene and relaxation from business or professional pursuits for a considerable period are of the utmost importance in the after-treatment of diabetes, when convalescence has been fairly established. I can point at least to one melancholy instance in which a return of the disease in a severe form was induced by close attention to business in gloomy premises, and continued residence in an unhealthy atmosphere, nearly a year after every trace of sugar had been removed from the urine, and the health and strength of the patient completely restored.

"If space had permitted, I could cite many instances in addition to the cases already published in my previous contributions to show the remarkable efficacy of the skim-milk treatment of diabetes—*properly applied.* But these are certainly sufficient to carry conviction to an unprejudiced mind that the disease is quite amenable to treatment if the remedy is *applied in time.* In time, I repeat, because there is certainly no other serious chronic malady in which the Hippocratic axiom '*occasio princeps*' is more applicable than in this.

"In illustration of this observation and of the importance

of early treatment I may here refer incidentally to two cases of diabetes now under my observation. In one the disease was apparently of only seven or eight months' duration; the patient, having during the last four months been kept under a restricted diet, was passing from four to five pints of urine containing 25.340 grains of sugar to the ounce. Under the skim-milk treatment the sugar entirely disappeared from the urine in fourteen days. In the other, the patient had not suffered from the severer symptoms of the disease longer than two months; but his diet was unrestricted, and he passed ten pints of urine daily, containing 30.092 grains of sugar per ounce. The whole of this was removed and the disease completely arrested in eleven days by the skim-milk treatment — a result in a great measure attributable to the early application of the remedy.

"During the last few years that I have directed my attention specially to this subject several cases have come under my observation in which the disease was so far advanced, and had inflicted such irreparable injury on the constitution generally and nutritive process — on the vitality of the organism, if I may so speak — that but little good could be effected beyond subduing the more distressing symptoms. In some of these instances, most unfortunately, the disease had not been recognized until it had advanced in its destructive progress for years; and this reflection urges me to remark that diabetes will still continue too frequently to escape detection, in a similar manner, until its symptomatology is rewritten in most of our text-books on medicine, thus enabling the student to become familiar with its features in its initial or earliest phase. As hitherto described, the symptoms enumerated are those characteristic of an advanced stage of the malady; namely, excessive thirst, a parched skin, a very large flow of urine, a voracious appetite, and emaciation. Now I venture to repeat what I have already stated on this important subject, that the invasion and early stage of the disease do

not produce this assemblage of symptoms, and must therefore be recognized by a widely different class of phenomena. These are: a general feeling of debility not due to emaciation or loss of flesh; considerable nervous and muscular prostration; lassitude and disinclination for bodily and mental exertion; occasionally a dull pain over the loins; loss of sleep; frequently dimness of vision; a feeling of numbness or loss of sensation over the surfaces of the thighs; a clammy condition of the mouth without much thirst, or preternatural dryness of the skin, which is frequently perspiring. Whenever we meet with this category of symptoms, more or less complete, our suspicions should be aroused and the urine carefully examined for sugar.

"In cases of diabetes too far advanced to admit of cure and the consequent removal of the sugar completely from the urine, the skim-milk treatment will reduce the quantity of sugar to a very much greater degree, and hold the disease in check far more powerfully than any other remedy yet discovered, to say nothing of the subjugation of the more distressing symptoms.

"In the treatment of diabetes it must be remembered that the source of the urine-sugar is the food. The most remarkable pathological character of the disease is its power of *misappropriating* the proximate principles of food required for the nutrition of the body and the production of animal heat, converting them into an unassimilable substance incapable of oxidation — namely, diabetic sugar — which is cast out of the system by the kidneys as a useless and injurious foreign substance. At first there is only a *partial* malassimilation of starchy and saccharine substances, but this becomes *complete* as the disease advances. Next comes a period when the fatty matter of the food is likewise converted into sugar; and when this stage of the disease is fully developed the whole of the carbonaceous alimentary principles are misapplied instead of being assimilated and undergoing their

normal metamorphic changes. Consequently they are not oxidized, and the temperature of the body falls below the healthy standard. Unfortunately this is not all, for if the disease runs its course unchecked it passes into a much more serious phase of its progress, and the albuminous or nitrogenous principles of the food also begin to contribute to the formation of diabetic sugar, and in quantity gradually increasing as the disease advances toward termination, until a very small proportion is left to nourish the tissues and maintain the heat of the body. Thus Professor Greisinger found, by careful experiment on a diabetic patient restricted to a rigorous meat-diet, that only *two fifths* of the whole of the albumen consumed in the food remained available for the purpose of nutrition, the rest being converted into diabetic sugar. But this does not even represent the full extent of the malassimilation of albumen in very advanced cases.

"These data supply a ready and intelligible explanation of the gradually increasing and at length extreme emaciation observed in diabetics, accompanied *not* by pyrexia, but an abnormally low temperature of the body, the latter condition being due to the complete absence from the blood of the oxidizable products of the assimilation of the carbonaceous principles of the food and the great deficiency of those derived from the albuminous. Hence we can readily understand the fact shown by the recent investigations of Pettenkofer and Voit that in diabetes there is a diminished consumption of oxygen and a correspondingly decreased production of carbonic acid by the process of respiration.

"I have already referred to the necessity on the part of diabetics to refrain from starchy and saccharine articles of food in order to prevent a return of the disease after recovery. The prohibition of bread from the regimen thus prescribed is generally complained of as the greatest hardship to be endured; consequently various substitutes have from time to time been invented. Thus we have the gluten bread

first suggested by Bouchardat, and the bran biscuits made according to different formulæ; the former, however, is insipid and unpalatable, while the latter, when free from starch, are composed entirely of *lignine*, and therefore contain no nutriment whatever. To obviate these serious objections it struck me that a very important end would be gained if a kind of diabetic bread could be manufactured consisting of an admixture of gluten and bran. I therefore communicated with Mr. Van Abbott, of Princes Street, Cavendish Square, on the subject, and he has succeeded in getting manufactured in France, after much difficulty, a bread consisting of eighty per cent. of gluten and twenty per cent. of bran nearly free from starch, and a very small quantity of butter. This bread is a much closer approximation to ordinary brown bread than any other substitute now in use. It is not only agreeable and palatable to the patient, as well as nutritious on account of the large proportion of gluten, but, what is also very important, it excites the peristaltic action of the bowels, and prevents or corrects constipation in consequence of the *lignine* it contains in the form of bran. I have no hesitation in saying that this bread is much superior to any other form hitherto produced for the use of diabetics. In closing, I may state that I have conducted some experiments with lactic acid in the treatment of diabetes, but find it possesses no specific action on the disease apart from the strict animal regimen in conjunction with which it is administered."

Paracentesis Thoracis.—Dr. Bowditch, of Boston, recently addressed the following letter to Dr. Allbutt, of Leeds, England, in reference to thoracentesis. As it may be supposed to contain the latest and most matured views of this eminent authority on the subject, we give it almost entire from the Practitioner:

"*First*—I always operate *first* with a very small exploring trocar and canula, which latter can be attached to a suction-

pump. This is the general rule, and has not been departed from for years, owing perhaps to the fact that physicians in Boston and vicinity rarely allow pus to remain so long as to 'point;' we operate long before that period arrives. I thrust the trocar in *fearlessly and quickly*, so as to avoid carrying the pleural false membrane before the canula instead of transfixing it. I choose a point in the back on a line with the angle of the scapula, and between the eighth and ninth or ninth and tenth ribs, and at least an inch and a half above a horizontal line drawn through the lowest point at which the respiratory murmur is heard in the other lung. I draw fluid slowly, but as continuously as possible, as long as I can do so, or until severe pain or stricture over the chest, or any serious discomfort of any kind comes on. Coughing does not always induce me to desist; but a severe, harassing cough checks further operation. After the operation I advise entire rest for twenty-four hours at least. I have not been obliged to use opiates, except once or twice, to check an *extravagant* cough; I should never check a mild one, as it is usually the healthful result of expansion of the lung.

"*Second*—No amount or character of complications of disease, either cephalic, thoracic, or abdominal, prevents me from operating when I find a large effusion, or any effusion that I think is adding distress to a patient already very ill. In some such cases I operate simply to give relief, and I do so as freely as I would use a subcutaneous injection of morphine, prescribe a blister, or a cathartic. I had one case, in a very aged man who had had manifest cardiac disease, but who at the time I was called to him had been unable to lie down for two or three weeks, with general dropsy; the legs, abdomen, and the left pleura being all distended. Tapping the chest and drawing away over two quarts of serum relieved all the severe symptoms, and he lived for years afterward. I therefore now *hope* for *more* than simple relief, even in the worst cases, and in those in which the prognosis

would undoubtedly be for a fatal result unless relief can be obtained by the operation.

"*Third*—Age and sex, and even the existence of pregnancy, I deem of no importance when considering the question of thoracentesis in a severe case. The youngest babe and the octogenarian, the strongest and fattest of men, with chest parietes so thick that my usual trocar (one and three quarters inch long) failed to reach the interior of the chest, and the thinnest, most emaciated of women, have all alike been operated on. In a pregnant woman I tapped four times before and five times after delivery, and finally made a permanent opening; she lived many years afterward in comparative comfort. In the case of my fat patient I had simply to get a new and longer trocar, and success followed. My only criteria for judging as to the propriety of operating in any cases are the questions: Is the dyspnœa severe enough? Has it occurred, even once, so severely that in the eyes of attendants it has seemed to threaten life even momentarily? or finally, Has sufficient time elapsed for remedies to have effect without such effect being produced?

"But *fourth*, on this question of time I fear I may not be able to satisfy either myself or you. I will, however, make one broad statement; viz., whenever I hear that a temporary orthopnœa has occurred, or that a severe dyspnœa is actually present, I never think of waiting, but *operate instantly*, however serious and complicated all the other signs may be. But if a patient has been ill only a few days or a week; if the effusion be small, the dyspnœa but slight; if remedies seem to be having a beneficial effect, I have hitherto, and I presume I may hereafter, let the fluid remain three or four weeks perhaps before *urging* an operation. My past experience has been in this direction, although perhaps I have erred in not doing as you suggest in the article already cited; viz., in not operating immediately after finding fluid effused even to a moderate amount. My reason does not give me valid

grounds for delay, and certainly my experience of the effects of the operation suggests nothing but that pleasant results would follow it whenever performed. I think therefore we *may* operate in any case where the quantity of fluid is obviously so large as to seriously obstruct the greater part of a lung; as, for example, when the level of the fluid seems to rise to the middle of the back, and in so doing oppresses the respiratory murmur in the entire organ. But in such a case, if it did not cause serious symptoms, I might defer to the patient's wishes for a time, and delay the operation a few weeks.

"*Fifth*—The character of the fluid, though it has at times influenced my prognosis, has never completely foiled me in the use of the exploring canula. Provided the operator steadily draws and does not interrupt the course of the fluid, coagulation can hardly take place in the minute instrument. Pus as thick as honey, and which required a little time to come to a level in the receiving basin, I have drawn through it. It is true, however, that on a few occasions (usually when first introducing the canula) I have been unable to draw out what I subsequently found to be serum. I have tried sometimes the throwing in (by reversing the operations of the pump) of a half ounce or less of lukewarm water. This sometimes has removed the lymph (I presume) that obstructed the end of the canula, and the subsequent attempts to draw fluid have been successful. If, however, the obstruction has still continued, the withdrawal of the instrument becomes necessary, and the reintroduction in the intercostal space just above the previous point of puncture has always succeeded.

"*Sixth*—Any '*valvular opening*' of the parietes, when using the trocar or in the common surgical operation, seems to me, in the light of my experience, worse than useless—absolutely bad. It is wholly uncalled for with the 'aspirator' canula; and when an incision is made it is impossible

in subsequent daily dressings of the wound and washings out of the pleura, to prevent the admission of air. It does harm by its liability to form a sinuous fistulous opening in the chest, whereby the ribs may become eroded. Moreover, the *free* exit of pus is prevented by it, and phthisis is more likely to set in.

"*Seventh*—When and how ought a permanent opening to be made? A decision on this point is often very difficult. Let me name a few favoring circumstances. (*a*) Youth is much more favorable than advanced life. (*b*) The length of time the disease has lasted, if short, is favorable, because it leads us to hope for an easy and early expansion of the compressed lung. If *many* months have elapsed since the disease began, we can have rather less hope; but mere length of time, however long, should not prevent us from making it, provided the operation seems called for by urgent symptoms. (*c*) Uncomplicated pleuritic effusion is of course more favorable than when the patient suffers also from other diseases. Hence I incline to make a permanent opening in a young or middle-aged, generally healthy subject—one who has been ill but a short time. Moreover, he must have been operated on at least once with the 'aspirator,' and pus must have been drawn. Moreover, this pus must show a tendency to reaccumulate rapidly. In such a case, and with serious symptoms supervening on the return of the effusion, a permanent opening may be made, I think, with a good hope of success, provided the subsequent treatment be also wise. On the contrary, a person above middle life, who has been long ill and afflicted with cough and other symptoms of phthisis, is one in whose case, until very lately, I should have preferred repeated tappings with the 'aspirator,' for I have feared the risk of hectic fever setting in under the influence of the constant drain of a long flow of pus. I frankly confess to a grave suspicion whether I have not erred in some of these cases; for certainly, though few have eventually *wholly* re-

covered, yet their lives have been lengthened and made more tolerable by the operation. But there is a class of intermediate cases between these two extremes which at times bitterly tests a man's powers of exact differential diagnosis or prognosis. All that can be said is that each case must be minutely and accurately examined, and the question of making a permanent opening decided only after a searching analysis of all the circumstance connected with it. While serous fluid is drawn by the 'aspirator,' *I think* we should not be justified in making a permanent opening with the absolute certainty that pus will soon be formed. Upon this question, however, we need facts. Blood, unless it be in the chest from an external injury and needing a surgical operation for its removal, should always contra-indicate a permanent opening; for in my experience a bloody fluid at the *first tapping* has always indicated serious and generally malignant disease of the lung or pleura, and therefore a permanent opening seems contra-indicated.

"*Eighth* — How shall a permanent opening be made? Formerly I used silver tubes. At times I have used those of gum-elastic. One patient contrived for himself a spiral silver-plated wire tube. This he found easier than either of the others. The silver tubes are painful. Those of gum-elastic have at times broken off into the pleural cavity. I know of one case, under the care of a professional associate, in which this accident caused great suffering. Moreover, all such tubes, of whatever substance made, are liable to become clogged. Very evil results also may follow, unless great care be taken. For example, although there may seem to be a daily free discharge of pus, a quantity of it may accumulate *below* the point at which the tube enters the chest, and there become semi-solid and fetid. The possible consequences of this state of things, as actually occurred in one of my own patients, are hectic fever and many of the symptoms of phthisis. In the case alluded to they continued to increase until I began thoroughly to wash out the cavity with warm

water, and the removal was made by this means of a large quantity of very fetid pus. Relief to all unfavorable signs immediately supervened, with ultimate recovery of the patient. When therefore hereafter I shall have made up my mind that a permanent opening is needed to prevent the constant reaccumulation of pus, my reason, and the small but very satisfactory result in two cases in which that operation has been done by free incision through an intercostal space, will induce me to advise that proceeding rather than the use of any tube or trocar however large. That incision I should generally advise should be made low in the back instead of in front as advised formerly in books of surgery. The dissection should be made carefully down to the pleura, and the cavity laid open to the extent of at least two inches, perhaps more, provided the free exit of pus can be made more thorough. I shall make no effort to keep out the air by valvular openings, because I know I can not prevent it from entering, and because I believe it will do no harm — certainly much less harm than any contrivance which, while trying to exclude air, prevents the free passage of all fluids out. I shall have that aperture kept freely open by lint until the cavity has fully healed from the interior, if that be possible. I shall use, from the second or third day, simple warm water or carbolized water injections into the pleura, and I shall let all fluids drain into a large poultice or mass of cotton-wadding placed on the chest."

Notes and Queries.

THE KENTUCKY STATE MEDICAL SOCIETY.—The annual meeting of this Society was held at Paducah, on Monday, April 1st, and was both large, harmonious, and spirited. The address of welcome, which was delivered by Dr. Joseph W. Thompson, of Paducah, was earnest, thoughtful, and well-conceived. The address of the president, Dr. Rogers, has already been presented to our readers. It is none too high praise of it to say that it is one of the most interesting and instructive addresses ever delivered before the Society, and altogether worthy of its justly distinguished author.

On motion of Dr. J. M. Keller, of Louisville, the constitution was so amended as to require candidates for membership to belong to some local medical organization, provided one existed in the neighborhood of the applicant's home. Physicians who may hereafter desire to become members of the State Society will do well to bear in mind this change in the constitution.

Dr. J. A. Foss, of Jefferson County, chairman of the Committee on Registration, made an exceptionally good report, which was unanimously referred to the Committee on Publication. Kentucky had at one time registration laws, which under the supervision of the lamented Dr. Sutton were yielding most excellent fruits to science; but in the legislative vandalism, as Dr. Foss calls it, of 1862 these laws were repealed, and have not been re-enacted. The cause, Dr. F. believes, to lie in the apathy and mismanagement of the twenty-five hundred doctors residing in Kentucky. He asserts that concert of action among us would secure what we

desire. He says: "Let us send to the next General Assembly such a petition in weight and numbers as was never before presented to that body. First of all, and above all, let us give evidence of our faith in registration by members of this Society signing this petition before we adjourn. Then secure the names of the members of all the local medical societies, and then the signature of every physician in the commonwealth. This done, and the legislature will begin to believe we are in earnest, and have some respect for us. But these things are not enough. Let our petition be presented to every candidate of every party before the August election, so we can vote understandingly. And finally let each and every physician in the state carry the petition in his pocket, and devote ten minutes each day to explaining the benefits of the law to his patrons and obtaining signatures. If we only get ten names each it will make 24,140. If we secure fifty apiece—and we can easily do it—it will swell the petitioners for a registration law to the unprecedented number of 120,700. Does any member of this Society doubt that we can get that number? Armed with such a petition we can demand that the first act of the legislature in December next shall be a registration law. They can not and dare not ignore us."

Dr. Foss, who was for many years a most popular representative in the legislature, is well qualified to speak as to the influences which affect our law-makers. We believe he has struck the key-note to the movement, and we shall own to deep disappointment if another session of the General Assembly adjourns without giving what so large and respectable a constituency unanimously demand.

Dr. D. T. Smith, of Louisville, chairman of the Committee on Vital Statistics, read a most interesting report, which was also referred to the Committee on Publication. Resolutions were introduced by Dr. Keller asking the legislature to pass the bill legalizing dissections in Kentucky. Dr. L. P. Yandell,

chairman of the committee to prepare memoirs of Drs. Taylor Bradford and Hugh Rodman, presented a report, which was forwarded to the proper committee with instructions to publish. Dr. Tauber, of Paducah, read an instructive paper on the Therapeutics of Electricity. Dr. R. C. Brandies, of Louisville, made an excellent report on the laryngoscope. The recent improvements in ophthalmic surgery were well set forth, in a carefully-written paper, by Dr. D. S. Reynolds, of Louisville, chairman. Dr. J. W. Thompson, of Paducah, chairman of the Committee on Surgery, read a report which exhibited a patient industry and conscientious research truly to be admired.

A communication was read from the Southwestern Medical Society setting forth that quackery was becoming a growing evil, and asking that some measures be taken to secure the passage of laws to protect regular practitioners. Referred, on motion of Dr. Keller, to the following committee, with instructions to act: Drs. Withers, Maxwell, and Gale.

A special report on obstetrics was made by Assistant Surgeon Eli McClelan, U. S. A., in a paper, entitled "Obstetrical Procedures among the Indians," an abstract of which at least we hope to be able to present our readers in advance of the regular publication of the proceedings of the Society.

Dr. J. J. Speed, of Louisville, uttered some fine truths and made some capital hits in a paper entitled "Take less Medicine." Dr. E. B. Richardson, of Louisville, read a spirited paper on Medical Education, in which he contended for a high standard of preliminary education in students of medicine as essential to genuine progress in the profession. The greater part of his paper, however, was taken up in criticisms of the address of the President of the American Medical Association, delivered, in 1872, at Philadelphia, and published in this journal in June last, which, though made in a dashing, pointed way, showed but too plainly that their author had failed to catch the controlling idea of the address which he

assailed. Dr. J. W. Singleton, of Florence Station, presented a well-written essay on Conservative Medicine.

The following amendment to the constitution was offered by Dr. J. M. Keller:

Resolved, that hereafter the Kentucky State Medical Society will adopt the customs and rulings of the American Medical Association to the extent that in the future, in the regular annual meetings of this Society, the same sections on the varied branches of the profession that exist in the American Medical Association will be observed in the State Society.

We very much doubt the expediency of this resolution. The Society has at no time been embarrassed by the number of reports made or papers read at its sessions. Indeed the trouble has been quite the other way; and if the offerings made by members are to be first referred to the appropriate sections instead of as now being heard and discussed in open session, we for one believe that the interest in the Society will decline, the number of contributions diminish, and the general usefulness of the organization be impaired.

The officers elected for the next year are: president, Dr. J. W. Thompson, Paducah; senior vice-president, Dr. J. M. Keller, Louisville; junior vice-president, Dr. R. M. Farleigh, Hopkinsville; recording secretary, Dr. J. A. Larribee, Louisville; corresponding secretary, Dr. J. D. Jackson; treasurer, Dr. D. S. Reynolds, Louisville; committee of publication, Drs. Turner S. Anderson, E. Richardson, and C. Rogers, Louisville.

The inevitable banquet, with its lights, its music, its wines, its savory viands, its toasts, its speeches, its songs, its mirth, and its next-morning headaches, closed the session, and the Society adjourned to meet in Shelbyville, April 7, 1874.

The Library of the American Medical Association at Washington.—The following abstract from the circular of the committee appointed by the Association to receive and

arrange the books sent to this library will, we hope, induce such of our readers as have not already done so to contribute to this great national enterprise—an enterprise in which no American physician can fail to feel the deepest interest.

"With a view to preserve for the benefit of the profession, in some accessible and central locality, copies of all home medical publications, the American Medical Association, at its annual meeting in May, 1870, resolved to establish at Washington, D. C., a library or repository of American medical works. It is designed that this repository shall contain copies of every contribution by American physicians to the literature and science of medicine, from the earliest settlement of our country, no matter how or where published, including all the books, pamphlets, journals, and even unpublished manuscripts, that can be collected. Nearly all physicians have some book or pamphlet of the character indicated, which may contain facts relative to the diseases of his section published nowhere else, which they can contribute without inconvenience, and which of itself is of trifling value; yet when many such treatises are assembled together from all parts of our country, embracing its nosology from the earliest period of its settlement, they will form a collection of the greatest importance to the profession.

"An appeal for contributions to this library is now made, personally and distinctly, to each and every American physician, medical publisher, and editor, to deposit copies of their works in this repository, where they will be carefully kept for reference and catalogued with the name of the donor. Contributions of the class of works mentioned are therefore respectfully and earnestly solicited from every source. Packages may be sent by mail or by Adams Express to either of us, which will be promptly acknowledged on reception, and a record of titles kept. The library-mark of the Association will be pasted on the inside of the cover of each volume, which will contain also the name of the donor.

WM. LEE, M. D., *Librarian*,
2111 Pennsylvania Avenue.

JOSEPH M. TONER, M. D., *Library Committee*,
No. 615 Louisiana Avenue."

PHILADELPHIA OBSTETRICAL SOCIETY.—We take pleasure in publishing the following appeal of the Philadelphia Ob-

stetrical Society for aid in the formation of a museum of distorted pelves and obstetrical and gynecological instruments:

"At a recent meeting of the Philadelphia Obstetrical Society it was decided to establish a museum for the collection of deformed and distorted pelves, and for the preservation of obstetrical instruments possessing historical value or illustrating new methods of treatment. The Society was led to take this action for these reasons:

"1. No subject at present possesses more interest to the obstetrician than the study of the various deformities of the pelvis, their mode of production, their influence on the process of parturition, and the principles which should guide the accoucheur when operative interference is deemed necessary. The profession is gradually becoming more and more convinced of the influence of contractions, more or less marked, in causing not only tedious and difficult labors, but also in the production of malpresentations and of many of the accidents of labor. At present there does not exist any extensive collection of female pelves by which a comprehensive study of this subject can be successfully undertaken. Feeling therefore the importance of such observation, the Society proposes to establish a museum having this object in view, and would therefore earnestly solicit such specimens of contracted pelves as may be in the possession of members of the medical profession who may be willing to yield the pleasure of individual possession in order to assist in forming a collection which will allow a wider and more comprehensive survey of this subject. If the original specimen can not be sent, casts or photographs are solicited. In certain cases possessing unusual interest the Society is prepared to offer a pecuniary recompense should this be desired.

"2. Recognizing the fact that various instruments designed for obstetric manipulations, or for the performance of operations in uterine surgery, having been superseded by new and improved models, now possess only an historical interest, the Society has determined to collect such instruments and preserve them as illustrating the progress of this branch of our art in America. We would also warmly urge upon the inventors of new or modified instruments, and upon surgical instrument-makers in general, the desirability of presenting to the Society specimens of instruments, pessaries, and special mechanical contrivances which they may be desirous of bringing before the profession.

"All objects, whether embraced in the first or second class, will be conspicuously placed in the museum of the Society, after having been labeled with an explanatory description and with the name of the donor. They will also be carefully preserved, open to the inspection of all interested in the support and advancement of obstetrics and the kindred branches of medicine.

"All objects for the museum may be sent to the secretary of the Society, Dr. J. V. Ingham, No. 1342 Spruce Street, Philadelphia, who will at once acknowledge their receipt, and will gladly furnish such additional information as may be desired.

"By order of the Society.

WM. GOODELL, M. D., *President.*

WM. F. JENKS, M. D., . . }
J. V. INGHAM, M. D., . . } *Committee.*"
HORACE WILLIAMS, M. D. }

A FATAL CASE OF CARBOLIC-ACID POISONING.—The following case is from the practice of Dr. Cowling, of this city:

A. B., aged sixty-six, of vigorous constitution, was operated upon for mammary schirrus, April 2d, and carbolized dressings applied to the wound. Traumatic fever set in on the second day, for which spirits of mindererus was prescribed. On the third day, the carbolic acid on hand being exhausted, four ounces more were ordered, and directions given for its proper dilution. At the morning visit, at eight o'clock, on the fourth day the patient was in a favorable condition. The temperature had fallen from 103° to 101°; skin moist and strength improved. At ten o'clock, her attendant aiming to give her a dose of the fever mixture, poured into a wine-glass a table-spoonful of pure carbolic acid, and adding about twice its bulk of water, gave it to her to drink. The attendant relates that as soon as the mixture was swallowed it came foaming out of the mouth, and the patient asked, "What is this you have given me? it burns." This was the last time she ever spoke. Looking then at the label on the bottle, and seeing a mistake had been made, the attendant passed her finger down the patient's throat, and endeavored

to make her vomit. Failing in this, she called to her neighbors to summon a physician. Dr. Frank Wilson was the first to arrive, and relates as follows:

"On Friday, April 4th, about ten A. M., was called in haste to see Mrs. B., who had taken by mistake, a few minutes before, a table-spoonful of carbolic acid. I saw her not more than five or ten minutes after the poison was administered, and she was then lying in an unconscious state, pupils contracted and insensible; breathing about 50 per minute; pulse 150, rather small, feeble, and intermittent; surface bathed in clammy perspiration. The mouth and throat, as far as could be seen, were whitened by the action of the carbolic acid; and pharynx and larynx were filled with mucus, giving rise to tracheal rales. She had a few minutes before I saw her swallowed two or three tea-spoonfuls of syr. ipecac. Calling for sweet-oil, I anointed the lips, cheeks, tongue, and throat as far as could be reached with the finger. An attempt was made to get her to swallow oil and white of egg, but failed. The stomach-tube was then passed down the œsophagus and a pint of oil and albumen pumped into the stomach, and after remaining a short time was withdrawn. No odor of carbolic acid could be detected about it, from which it was inferred that the carbolic acid expended its force before reaching the stomach. Two ounces of whisky were then thrown into the stomach, and the tube withdrawn. The pulse was 160 and a good deal weaker, still intermittent; temperature normal; respiration somewhat quicker; pupils contracted and insensible; countenance indicating a cyanosed condition; the superficial veins of the head distended. Oxygen gas was then administered, under which the breathing became fuller, the pulse a little stronger, and was reduced to 140 or 150; but consciousness did not return, and the breathing was still greatly obstructed by the mucus accumulated in lungs and trachea. Tracheotomy was proposed, but the amount of laryngeal obstruction did not seem to warrant it. Trans-

fusion was also suggested, but objected to on the ground that the violence of the poison seemed to have been expended on the nervous centers to such an extent that the transfusion of fresh blood would be useless. She gradually sank, the pulse becoming flickering, the extremities cold and breathing superficial, and died about twelve M., two hours after taking the poison.

MEDICAL JOURNALS—WANTED.—Some of our readers must surely have some of the missing journals asked for in the advertisement, to be found on another page, of the Surgeon-General of the United States Army; and, having them, they will do a service to the medical public by sending them to Washington.

THE HART COUNTY (KY.) MEDICAL SOCIETY.—This new organization, composed of some of the best physicians in the state, met at Munfordville March 19th, when Dr. H. Gardner was elected president, Dr. P. C. Sutphin vice-president, Dr. W. Adair recording secretary, Dr. W. W. Bowling corresponding secretary, and Dr. C. J. Walton treasurer.

The secretary has kindly sent a report of the scientific work done, which for the want of space we must condense into a very few lines.

Dr. Gardner reported a case of *Vaginal Occlusion*, with labor at full term. The cause of the occlusion was found to consist in an imperforate hymen, resisting all efforts at rupture by the finger, preventing delivery for a considerable length of time, and only permitting it after being partially divided by the knife. The woman subsequently died from a vaginal rupture occasioned by the hymen. Dr. G. regretted that he had not made earlier and freer incisions, and would certainly do so under similar circumstances again. He thought the case remarkable for the persistent resistance of the hymen, yielding neither to the fingers nor to the strong action of the child's

head pressing upon it, and requiring the use of the knife before it would give way.

Puerperal Convulsions.—Dr. Walton reported a case of this frightful malady, and gave it as the result of his observation that the affection prevailed generally only in extreme conditions, either hot or cold, of the atmosphere.

A long and animated discussion followed the question whether physicians in attendance on small-pox can themselves become the medium of contagion? in which the vice-president and most of the members present took part.

Metastatic Erysipelas.—Dr. Adair stated that he had recently seen a child attacked with erysipelas where the disease leaving the surface developed peritonitis, which proved rapidly fatal.

Dr. Josiah C. Nott.—This distinguished surgeon died at Mobile March 31st, on the morning of his seventieth birthday. Dr. Nott was born at Columbia, S. C. He graduated in medicine at the University of Pennsylvania; demonstrated anatomy for several years in connection with the Philadelphia Almshouse; visited Europe; and returning settled in Mobile in 1833. Here he at once acquired an extensive practice, and made himself felt in the profession of the entire country as a bold, original thinker and a vigorous writer. In 1856 he occupied for a short time the chair of anatomy in the University of Louisiana. Two years later he established the Medical College of Alabama in Mobile, his own name securing to it from the start a place among the best institutions in the country, and his teachings in surgery lending it a peculiar attraction to students throughout all the southern states.

With the fall of Fort Sumter in 1861 he took service in the army of the Confederacy, and filled with distinction the highest positions in its medical department. At the close of the war he was driven by impaired health to leave the

beautiful city where he had spent so many years of his life and seek a more northern climate. He went to Baltimore, where his good name had long preceded him, and immediately took a commanding position in his profession. A year after he was persuaded to remove to New York, since which time he has been recognized as one of the leading gynecologists in that great city.

Dr. Nott was no common man. As a surgeon he was original, bold, collected, dexterous; as a lecturer, fluent, earnest, striking; as a writer, scholarly and forcible; as a man, independent, dignified, kindly, genial; and as a friend, steadfast, sympathetic, and true. His death will be deplored as a public calamity.

Dr. Charles M. Way. — It was known to the friends of this most amiable and estimable gentleman that he had been for a number of years in declining health, and that for two years past he has been almost wholly confined to his house, so that the end which came April 8th, shortly after he had entered on his seventy-third year, was not unexpected by those who had long watched the decay of his powers.

Dr. Way was born in Springfield, Ky. He graduated in Transylvania University, and engaged at once in the practice of his profession. Of pleasing person and address, united with cordial manners and that confidence in the healing power of medicine which imparted boldness to him as a practitioner, he won at once upon the people. For many years past he had virtually surrendered his profession, but he remained to the last always alive to whatever affected its character and interests. If the citizens of Louisville were asked, one by one, who of all the men that have adorned our city in the last thirty years was first in intellect, in professional standing, in usefulness, in public spirit, no doubt many different answers would be returned to the questioner. But if they were asked who of all the men they have met with in this world was in

their opinion the most hospitable, the most unselfish, the most considerate of the interests and feelings of his friends, we believe that those who knew Dr. Way intimately would declare unhesitatingly for him.

EPITAPHS.—Good Lord! Our sterling contemporary, the Edinburgh Medical Journal, occasionally admits a bit of pleasantry, as witness the following from one of its correspondents:

EPITAPH ON SIR FIELDING OULD, M. D.,

An eminent Midwifery Practitioner in Dublin in the last century.

"Sir Fielding Ould was made a Knight.
He should have been a Lord by right;
For then each lady's prayer would be,
O Lord! good Lord! deliver me."

EPITAPH ON PAT M'CARTY.

Beneath this stone lies Pat McCarty,
In humble hope to rise in glory.
His doctor's name was Moriarty,
Who soon obliged him *ante mori.*

THE AMERICAN PRACTITIONER.

JUNE, 1873.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

ADDRESS BEFORE THE MEDICAL EDITORS' ASSOCIATION.

BY THEOPHILUS PARVIN, M. D.,
PRESIDENT.

In the last one of Trousseau's Clinical Lectures this famous teacher asserts that medicine always takes its inspiration from the reigning philosophy, and that every philosophical doctrine has in the history of medicine a corresponding medical doctrine. The philosophy of Locke and Condillac is manifest in the reigning medical doctrines of to-day. Pathology and semeiology—departments of medicine comparatively simple and clear—have been most industriously cultivated, while therapeutics, the study of which is infinitely more complex and difficult, has been neglected.

Much as we reverence the name and character of John Locke, who, to-day a "sceptered sovereign," from his tomb so largely rules the minds of men, in his sensational philosophy he has influenced and does still influence medical

investigation and study. Condillac and Diderot, who were the expositors of that philosophy in France, taught that "our ideas were nothing more than transformed sensations;"* and that "every idea must necessarily, when brought to its state of ultimate decomposition, resolve itself into a sensible representation or picture."† Do you not see how, out of such a philosophy transplanted into medicine, there will grow beautiful pictures of pathological results, mathematically drawn, artistically colored, weights and measures, test-tubes and evaporating dishes, and precise chemical re-agents, stethoscopes and pleximeters, chest-measurers, microscopes, pulse-measurers and thermometers, but not necessarily the cure of a single patient.

But to return. The relation between medicine and philosophy is of much earlier recognition. Said Aristotle, "The philosopher should end with medicine, the physician commence with philosophy." And Sir William Hamilton, one of the greatest of modern thinkers, commenting upon this assertion, has remarked that the history of medicine is in fact a part, and a very important part, of the history of philosophy. And indeed two centuries before Aristotle, and a century before Hippocrates, Pythagoras had illustrated in his teaching this relation to some extent, making physicians of his pupils.

It would be interesting too to observe, if time permitted and it were not foreign to the special purpose of this address, that the father of medicine pointed out the nature of inductive philosophy so many centuries before the immortal Bacon inaugurated a new era in human knowledge. We might also see, in tracing the history of medicine, the manifestation in different periods of a fundamental principle underlying all philosophy; to-wit, the love of unity, tracing back streams to a common fountain, and all branches, fruit, and foliage coming from a common trunk, springing from a single germ.

* Condillac. † Diderot.

For centuries this unity is supposed to be in that humoral pathology which rules the medical world; and then the animism of Stahl and the eclecticism of Boerhaave, and then the solidism of Hoffman.

While philosophy and medicine have such community of history and such dependence of relations, physicians are prone to forget and the public do not know how largely both philosophy and literature are indebted to our profession. Let us consider then, if you please, the doctor in literature, using literature as inclusive of philosophy.

Sterne says, referring to preaching, the first thing is to select a subject, then for a text, and that "Pontus, Galatia, Cappadocia, Asia, and Bithynia" will answer as well as any. Such a text as that suggested by the witty curate could not be regarded as equivocal—is not even vocal—as innocent of speech as a stump or a log, while possibly a shade of ambiguity rests upon the doctor in literature. Some might thereby understand the position assigned the medical man in history, the character attributed him by famous men, the portrait which poets and novelists have drawn.

We might now and then protest that our position was a malposition, that our character was aspersed, and that our portrait was an unlikeness. Yet if Cato the Censor, remembering the reply made by Hippocrates when urged with the promise of immense rewards to visit the king of Persia, warns his family never to employ a doctor, we can be more than compensated by reading the eloquent praise Cicero has given our calling. If Molière's pasquinades annoy, we find ample comfort in Homer's famous couplet; and we are willing to bury Montaigne's pleasant jests and Rousseau's unhappy sneers under Voltaire's graceful praise or Pope's kind words, when he says of physicians, "They are in general the most amiable companions and the best friends, as well as the most learned men, I know." What if the Ursus Major of British literature, Dr. Johnson, did ridicule the ascertaining a man's

physical condition by feeling his pulse, he spoke kindly, nobly of us too. What if the first Napoleon did exalt surgery and disparage medicine, has not his nephew, if French authorities are to be believed, paid the penalty of trusting British surgery instead of French medicine? And if Bulwer, on the one hand holding the coarse therapeutics of the Silesian boor, on the other grasping the shadowy fancies of mesmeric marvels, draws in his "Strange Story" the picture of a doctor most unacceptable to us, we will find in Walter Scott, Charlotte Bronté, Miss Muloch, and George Eliot better sketches of the medical character, truer representations of the medical life—nay, rather than Bulwer's doctor we prefer Sterne's Dr. Slop. Possibly G. P. R. James has drawn us faithfully, if life were only long enough to get past his solitary horseman slowly ascending a hill and ascertain!

However, it is not what others have said of doctors, but what doctors have said for themselves in literature, that your attention is to be directed to this evening.

I feel confident that any one for the first time investigating this subject would be astonished at the long list of physicians celebrated in the literary world, and by the amount and variety of their contributions. Even in those instances wherein the profession of medicine was abandoned for more lucrative avocations, from positive failure to get practice, or from some other cause, the influence of medical study or of medical practice could not be removed from their minds, and is sometimes clearly traceable in their writings. Illustrative of the last point, study Eugene Sue's description of cholera in "The Wandering Jew;" and you more fully appreciate it remembering the writer was bred to medicine, and had been engaged for a few years in practice.

Schiller's professional career was even more brief than that of Sue. His first play, "The Robbers," brought upon him the censure of the Duke of Wurtemburg; and his secretly visiting Mannheim to witness the first representation of the

tragedy led to his being put under arrest for a week. "As the punishment did not deter him from again transgressing in a similar manner, he learned that it was in contemplation to try more rigorous measures." He resolved to be free, forsook his regiment, forsook medicine; seizing the first opportunity to get "beyond the reach of turnkeys, grand dukes, and commanding officers."

I wish we could claim Herder as one of our fraternity—Herder, in whose soul, "precisely as in a poem, every thing coalesced, and the good, the true, the beautiful constituted an inseparable trinity;" but history compels the statement that this man, who came to fill so large a place in German thought and literature, turned from his medical to theological studies at witnessing a dissection.

Medicine has been prolific in poets, notwithstanding Nietz, in his "Pathology," actually placed the *furor poeticus* between *chorea* and the *furor uterinus*. Thorough and accurate scholarship too have been found in the profession, from the days of Galen and Celsus, from the days of the Evangelist Luke, a physician, who wrote better Greek, it is said, than Matthew, Mark, or John. In the Protestant burying-ground at Rome there rest the remains of an Englishman, dying at twenty-six years, the tomb bearing his own epitaph: "Here lies one whose name was writ in water." The literary judgment of the years contradicts these sad words, and the name of John Keats, who turned aside from the duties of a surgeon to seek health in a southern clime, lives forever among the gifted children of song. We lay claim likewise to the poet, essayist, naturalist, historian, and novelist, Oliver Goldsmith; only the failure to get into practice as soon as his pecuniary necessities required compelled him to seek other avocations.

Sir James Mackintosh must be reckoned among those whose first love was given to medicine. The strife between Cullenism and Brunonianism was at its height when he was an Edinburgh student, and he espoused the latter cause,

upholding it with that wonderful ability and dialectic skill which subsequently were fully developed and shone so conspicuously in forensic strife and philosophical discussion. His professional prospects in London, whither he went after completing his medical studies, were no more encouraging than poor Goldsmith's, and the doctor was soon lost in the lawyer. If pecuniary considerations alone influenced the change, I wonder that the first part of the following couplet remains so long uncontradicted:

> Dat Galenus opes, dat Justinianus honores,
> Sed genus et species cogitur ire pedes;

a couplet which quaint old Burton, in his "Anatomy of Melancholy," thus translates:

> The rich physician, honored lawyers ride,
> While the poor scholar foots it by their side.

Locke too we claim as a physician. He was forty-two years old when he received his degree, and was for some period of time an active practitioner; and probably would have been thus engaged longer had it not been for the unsettled condition of civil affairs in England and the perils to which he was exposed, leading to prolonged absence abroad. The last half of the seventeenth contury in England was crowded with great events; revolution and counter-revolution, a monarch dethroned and beheaded, a commonwealth, and then a monarchy again. It was prolific in great men. There was Samuel Butler, with his keen and matchless satire in "Hudibras;" Dryden, not untainted by the corruptions of an age which the fires of civil war had not purified, yet uttering his poet inspirations that can not die. There was the mighty master of epic, John Milton, rising to dwell in the blue serene, one of the gods of men; there was the inspired tinker, John Bunyan, writing "Pilgrim's Progress" in Bedford jail; and there was Jeremy Taylor, "like an angel newly descended from the visions of glory," proclaiming divine truth from the

pulpit in his magnificent prose-poetry, and giving precious lessons in "Holy Living and Dying" that have been comfort and strength to thousands and tens of thousands of devout believers unto this hour. But among these and other famous men of the era no one has exerted so great an influence upon the human mind as John Locke.

Haller ranks among the most eminent of our profession, and he was one of the most industrious contributors to science and literature the world has ever known. "His writings and teachings exercised more influence upon the development of physiological as well as medical and botanical science than those of any other savant of the eighteenth century. His literary activity was prodigious. Besides numerous contributions to German and French scientific periodicals, he wrote no fewer than twelve thousand reviews, and many novels and descriptive and didactic poems." The father of modern physiology, we perpetuate his name in Halleriam irritability; for, in the words of Marshall Hall, it is to Haller we owe the accurate distinction of this principle from other principles in the animal economy, its full development, and its application to physiology. As illustrative of his great professional attainments, and indicative of his wonderful industry, I may mention that he occupied four chairs in the University of Göttingen—botany, anatomy, surgery, and medicine; and yet he is said to be better known among his countrymen by his novels and poetry than by his scientific and professional labors.

Born three years sooner, dying twenty years earlier, than Haller was David Hartley, successful as a physician and eminent from his contributions to philosophy. He was the first to endeavor to explain the phenomena of mind by physiological laws. He was the first to clearly expound the doctrine of association of ideas. The great poet Coleridge, who at one period was a warm admirer of the Hartleian philosophy, named his oldest son for its founder, David Hartley

and in the following lines indicated one of the hypotheses of that philosophy:

> ———"And he of mortal kind
> Wisest, he first who mark'd the ideal tribes
> Up the fine fibers thro' the sentient brain."

While alluding to the study of physiology in relation to that of the phenomena of mind, two other observations are appropriate. One of the most brilliant of Edinburgh professors, the successor of Reid and Stewart, and he himself succeeded by Sir Wm. Hamilton—I mean Dr. Thos. Browne—left a medical practice for his chair, and published his lectures under the title of "Physiology of the Human Mind."

Still more. In 1860 the present professor of medicine in the same university published a work entitled "Mind and Brain, or the Correlations of Consciousness;" a second edition being issued in 1869. The position taken by its author, Dr. Laycock, is that to understand the laws and modes of existence of man as a rational being—how he may be perfected, and how his wants may be best determined and fulfilled—it is necessary to know not only how the encephalon is constructed mechanically and how it acts dynamically, but under what conditions it is constructed, and according to what laws it is operative.

Dr. John Abercrombie, the first physician in Scotland in his day, is known not only by his "Researches upon Diseases of the Brain and Spinal Cord," but still better by his contributions to mental and to moral philosophy. Erasmus Darwin, also a successful practitioner, attained considerable reputation both by his poetry and his "Zoönomia."

The name of John Mason Good is devoutly cherished, not only for the many excellent qualities of its possessor, but also for his industrious life, his varied culture, and his valuable contributions to medicine and to literature. Incidentally, let me say that this same Dr. Good, so well qualified to be an instructor of physicians, and so successful, was, even after a few years' practice, actually rejected upon examination

by the Royal College of Physicians; a fate which also befell another of our fraternity, equally celebrated in the literary world, Dr. John Armstrong. So too Matthew Baillie was rejected, and yet he lived to do more for medicine and to become more eminent than any of the censors who rejected him. As to the rejection of Drs. Good and Armstrong, Dr. James Johnson attributed it to the antiquated and ridiculous system of testing a medical man's acquirements by a string of questions in a dead language.

Dr. Good, though engaged in a laborious practice, much of it obstetrical, found time to prepare a "Nosology," a "Practice of Medicine," and his "Book of Nature," to write for a daily paper, to edit the letters of Junius, translate Lucretius, contribute to magazines and reviews, and also to become an excellent scholar in some of the Oriental languages. His attainments in Hebrew and Chaldee were superior. "Not an hour, nay, not a minute of his working-time was unemployed. In going the ordinary routine of his practice in his carriage he was never without the means of study. If detained at a tedious case, the intervals of his attendance were passed, not in reading only, but in composing and writing, and often on subjects of abstruse biblical criticism. His translation of one of the most difficult books in the Old Testament, and at the same time the earliest complete poem in the world, the Book of Job, and his translation of and critical commentary on the Psalms, sufficiently attest how closely and laboriously and how effectually he must have occupied his every interval in studies as remote as possible from his ordinary duties."

Dr. John Armstrong was a brilliant lecturer in one of the London medical schools, contributed to medical journals, and wrote both poems and prose essays. His best-known poetical work was entitled "The Art of Preserving Health"—one of the few instances in which Hygeia has enlisted the Muses in the enforcement of her precepts. There has not been conceded Dr. Armstrong a high rank among poets. He died

when comparatively young — only forty-six — and possibly, had he lived, might have attained such rank. Nevertheless the following fragment, in its sad and simple beauty, is worthy of being remembered, especially by doctors:

> "Obscurely let me live and die—
> But not unknown, unhonor'd lie;
> Oh! may the poor and wretched trace
> My grave in some sequester'd place,
> Where nameless streams my requiem sound,
> And Nature breathes in beauty round.
> There ardent may their blessings rise,
> Like incense offered to the skies."

Earlier in history, and living three years longer than the measure of Dr. Armstrong's days, was Mark Akenside, not so well known in the annals of medicine as Dr. Armstrong, but occupying a higher place in literature. William Hazlitt however, I ought to mention, thinks Armstrong the better poet. When twenty-three years old Akenside wrote the poem by which his fame is assured, "The Pleasures of Imagination," a work from which "passages are frequently quoted in critical and philosophical discussion." Taine, in his "Lectures on English Literature," refers to its author as a learned thinker and noble imitator of lofty Greek poetry. One can almost imagine Dr. Akenside one of the old Greeks, in all the completeness of Grecian culture, transplanted from beneath a Grecian sky to dwell in London fog, a sort of half-christian baptism given him, a Neoplatonist in theology. Some of his poetry exhibits exquisite grace of diction along with dignity and power.

> ———"from the birth
> Of mortal man the Sovereign Maker said,
> That not in humble nor in brief delight,
> Not in the fading echoes of Renown,
> Power's purple robes, nor Pleasure's flowery lap,
> The soul should find enjoyment; but from these,
> Turning disdainful to an equal good,
> Through all the ascent of things enlarge her view,
> Till every bound at length shall disappear,
> And infinite perfection close the scene."

Again: ——"the men
Whom nature's works can charm with God himself
Hold converse; grew familiar, day by day,
With his conceptions, act upon his plan,
And form to his the relish of their souls."

The verses Akenside wrote "Upon hearing a Sermon against Glory" are doubtless familiar to most of you. Nevertheless permit me to quote the second of them:

"If to spurn at noble praise
Be the passport to thy heaven,
Follow thou those gloomy ways;
No such law to me was given;
Nor, I trust, shall I deplore me,
Faring like my friends before me;
Nor a holier place desire
Than Timoleon's arms acquire,
And Tully's curule chair and Milton's golden lyre."

Dr. Akenside's frequently-expressed and unbounded admiration of the ancients exposed him to severe ridicule. Foremost among those who ridiculed this foible was Smollett, a doctor too, by the way; for after his professional studies, and serving for some time as surgeon's mate on a man-of-war, he was for a little while a candidate for London practice; unsuccessful, he gave himself entirely to literary pursuits. Those who have read "Peregrine Pickle" remember that a physician gives a dinner in the manner of the ancients, to which entertainment Peregrine, in order to render the physician's taste more conspicuous and extract from it the more diversion, invited some foreigners—a French marquis, an Italian count, and a German baron. This physician was intended as a caricature of Dr. Akenside. Yet the gods are forever just. Not many years after Sterne, in his "Sentimental Journey," held up Smollett to a ridicule if not as coarse at least more enduring. George Crabbe,

"Nature's sternest painter, yet the best,"

Byron has said, had a more brief medical career than Smollett. Like him, failing to get practice, he entered upon literature;

and she proving, at first at any rate, a most ungracious stepmother, by the advice of Edmund Burke, who greatly befriended him in his poverty, he took orders, and comes down to us a reverend instead of a doctor.

Crabbe's pictures of the poor have been drawn with wonderful accuracy. Some of them indeed could scarcely have been written save by a medical hand. The "Parish Workhouse and Apothecary" illustrates this. We can only give the concluding portion:

"But soon a loud and hasty summons calls,
Shakes the thin roof, and echoes round the walls;
Anon a figure enters, quaintly neat,
All pride and business, bustle and conceit,
With looks unaltered by these scenes of woe,
With speed that, entering, speaks his haste to go.
He bids the gazing throng around him fly,
And carries fate and physic in his eye;
A potent quack, long versed in human ills,
Who first insults the victim whom he kills;
Whose murderous hand a drowsy bench protect,
And whose most tender mercy is neglect.
Paid by the parish for attendance here,
He wears contempt upon his sapient sneer.
In haste he seeks the bed where misery lies,
Impatience marked in his averted eyes;
And some habitual queries hurried o'er,
Without reply he rushes on the door.
His drooping patient, long inured to pain,
And long unheeded, knows remonstrance vain.
He ceases now the feeble help to crave
Of man, and silent sinks into the grave."

The picture which Crabbe has drawn of "Quacks and Quackery" is admirable, and as true now as it was when written nearly a century ago.

"But now our quacks are gamesters, and they play
With craft and skill to ruin and betray;
With monstrous promise they delude the mind,
And thrive on all that tortures human kind.
Void of all honor, avaricious, rash,
The daring tribe compound their boasted trash.

Tincture or syrup, lotion, drop, or pill,
All tempt the sick to trust the lying bill;
And twenty names of cobblers turned to squires
Aid the bold language of these blushless liars.
There are among them those who can not read,
And yet they'll buy a patent and succeed;
Will dare to promise dying sufferers aid,
For who when dead can threaten or upbraid?
With cruel avarice still they recommend
More draughts, more syrup to the journey's end.
'I feel it not.' 'Then take it every hour.'
'It makes me worse!' 'Why then it shows its power.'
'I fear to die!' 'Let not your spirits sink;
You're always safe while you believe and drink.'
How strange to add that in this nefarious trade
That men of parts are dupes by dunces made;
That creatures Nature meant should clean our streets
Have purchased lands and mansions, parks and seats;
Wretches with consciences so obtuse they leave
Their untaught sons their patients to deceive.
And when they're laid upon their dying bed
No thought of murder comes into their head;
Nor one revengeful ghost to them appears
To fill the soul with penitential fears."

But of what avail this and similar sketches of quacks and quackery? As Robert Southey well says in "The Doctor:" "Man is a dupable animal. Quacks in medicine, quacks in religion, quacks in politics know this, and act upon the knowledge. There is scarcely any one who may not, like a trout, be taken by tickling." A church dignitary once said, "*Populus vult decipi; et decipietur.*"

Among the most famous wits and fluent writers of Queen Anne's time was Dr. John Arbuthnot. His writing valuable essays upon medical subjects, holding the post of censor in the Royal College of Physicians, and delivering the Harveian oration did not prevent his being celebrated in literature. Swift said of him, "He has more wit than any of us, and more humanity than wit." Pope most highly esteemed him, as the following couplet illustrates:

"Friend to my life, which did not you prolong,
The world had wanted many an idle song."

Of his graver writings the discussion of the Deluge and an argument for the "Utility of Mathematical Study" are the most noticeable. In conjunction with Swift and Pope he formed the plan of writing a satire on the abuse of human learning in every branch. The first book, chiefly the work of Arbuthnot, was issued; but the failing health of Swift and the death of Queen Anne — Dr. Arbuthnot was her physician — prevented the continuance of the work. One of the characters in this book, "Cornelius Scriblerus," is supposed to have suggested Walter Shandy to Sterne. It has been thought too that object-lessons, which have become in recent years so much the fashion in teaching, were foretold in the following passage from Scriblerus:

"The old gentleman so contrived it to make every thing contribute to the improvement of the boy's knowledge, even to his very dress. He invented for him a geographical suit of clothes, which might give him some hints of that science, and likewise some knowledge of different nations. He had a French hat with an African feather, Holland shirts and Flanders lace, English cloth lined with Indian silk; his gloves were Italian and his shoes were Spanish. He was made to observe this, and daily catechised thereupon, which his father was wont to call 'traveling at home.' He never gave him a fig or an orange but he obliged him to give an account from what country it came."

John Wolcott, better known as Peter Pindar, was also for some time a medical practitioner. He went to Jamaica as the medical attendant of Sir William Trelawney, the governor of that island. There he seemed to have exercised a multiplicity of functions—not only medical, but also those of private secretary and chaplain. "He read prayers and preached whenever a congregation appeared in his church, but three Sundays out of four not a soul came to receive the benefit of his ministrations." He was an admirable shot, and on his way from the house to the church amused himself shooting

pigeons. Arrived at the church, he waited ten minutes for worshipers; none coming, the building was closed, and he relinquished his prayer-book for his gun, and thus was a representative of the church militant. If only a few colored Christians presented themselves at the time for service, Wolcott would buy them off. It is related that one cunning negro became very faithful in presenting himself at the church-door, expecting to be bought off, an expectation which was not disappointed a single time for nearly a year. The usual dialogue between the parson and the money-loving negro was as follows: "What do you come here for, blackee?" "Why, massa, to hear your good sermon and all de prayers ob de church." "Would not a bit or two do you more good?" "Yes, massa doctor; me lub prayer much, but me lub money more." Upon the death of Trelawney Wolcott returned to England and endeavored to establish himself in medical practice; failing in this, he devoted himself to literary pursuits, becoming famous as a satirist. Indeed his pen was so powerful it is said that the Ministry, at least once, tried to bribe him to silence.

Time would fail me to speak of Dr. Currie, the accomplished and affectionate biographer of the poet-plowman, Burns; of Dr. Moir, whose fugitive poetical contributions can not be too much admired; of Sir Richard Blackmore, eminently successful in practice and most diligent in literary labors, which, however, have done less to preserve his name than Pope's merciless satire and Dryden's fierce invective. Yet we should remember this, that in an age when the drama was grossly licentious Sir Richard was brave enough to be the first to lift his voice in protest and condemnation, and that both Johnson and Addison expressed a favorable opinion of his chief poem.

Sir Samuel Garth—the generous physician who pronounced a Latin eulogy over the remains of Dryden, and secured for them honorable interment in Westminster Abbey—was a

contemporary of Sir Richard's, but had none of his austere and rigid morality. He was a man of remarkable wit, great literary ability, and one of the choice spirits of the famous Kit-Kat Club. He loved genial companions, tarrying with them at the wine-cup when he ought to have been visiting his patients. Upon one such occasion he was told, "Really, Garth, you ought to have no more wine, but be off to see those poor devils." "It's no matter," Garth replied, "whether I see them to-night or not; for nine of them have such bad constitutions that all the physicians in the world can not save them, and the other six have such good constitutions that all the physicians in the world can't kill them."

Another anecdote of him, well worth preserving, is this: Writing a letter at a coffee-house, he found himself overlooked by a curious Irishman, who was impudently reading every word of the epistle. Garth took no notice of the impertinence until he had finished and signed the body of the letter, when he added a postscript of unquestionable legibility: "I would write you more by this post, but there's a d—d tall, impudent Irishman looking over my shoulder all the time." "What do you mean, sir?" roared the Irishman in a fury. "Do you think I looked over your letter?" "Sir," replied the physician, "I never once opened my lips to you." "Aye, but you have put it down for all that." "'Tis impossible, sir, that you should know that, for you have never once looked over my letter."

Turn back now for a few minutes to a famous man of the sixteenth century, one combining the characters of monk, physician, scholar, and philosopher.

Understanding that one of the medical schools is conferring its degrees *in absentia*, the name and fee only being required to secure the honor, he gravely sends the name of Johannes Caballus, with the requisite money. In due time a diploma comes, and the givers of it are subsequently informed that it is for a horse named John—the first example of a horse-

doctor! This same medical monk kneels in the church before the statue of Charles VIII. A brother monk comes, suggesting that he has mistaken the statue for that of a saint, but he immediately replies: "I am not such a blockhead as you think me, nor yet so blind as not to know that I kneel before the representation of King Charles VIII., for whose soul I was praying because he brought a disease out of Naples into this kingdom by which means I and other physicians have been considerable gainers." Again, his patron, an eminent cardinal, is ill, and a consultation of physicians was called, these deciding that the patient should have an aperient decoction. Forthwith this practical wit has a fire made in the yard and a kettle of water hung over it, into which he puts all the keys he can collect, busying himself stirring them with a stick. The consulting physicians ask him what he is doing. "Following your directions." "How, in the name of Galen?" cried one of them. "You are for something very aperitive," he replied; "and, by Hippocrates, I think you will own nothing can be more aperitive than keys, unless you would have me send to the arsenal for some pieces of cannon." The final scene is after seventy years of eventful life, in the church and out of it, a loiterer in duty and then one of the most diligent students and learned men of the age; translating several books of Galen and also the aphorisms of Hippocrates, accompanying the latter with annotations; jesting with equal daring before king or pope, in palace or in church, this man asks, as he is about to breathe his last, to have his domino put on, because he is cold, adding, "Besides *Beati qui moriuntur in Domino.*"

It is hardly necessary that I should utter the name of Francis Rabelais, one of the most remarkable men that ever lived. Taine, in his brief allusion to Rabelais, hardly does justice, it seems to me, to his ability, and speaks too harshly of his writings. Rabelais, "that good giant, that drunken doctor, rolls himself about joyously on his dung-hill, thinking

no evil. The dung-hill is warm, convenient, a fine place to philosophize and sleep off one's wine." And again, after referring to the attacks made by Cervantes upon chivalry, says, "More coarsely, more openly, Rabelais, a rude commoner, drowns it with a burst of laughter in his merriment and nastiness." And yet, if you should chance to read that quaint book, "The Doctor," written by one of the purest Christian gentlemen that ever lived, Robert Southey, you will find in one of the earliest chapters an incident, delicately related, which is one of the most objectionable in Rabelais's great work. Hazlitt speaks better of Rabelais than his own countryman. "He was a mad wag, the king of good fellows, and prince of practical philosophers." And Coleridge has written: "Beyond a doubt Rabelais was among the deepest as well as boldest thinkers of his age. His buffoonery was not merely Brutus's rough stick, which contained a rod of gold; it was necessary as an amulet against the monks and legates. Never was there a more plausible and seldom, I am persuaded, a less appropriate line than the thousand-times quoted

'Rabelais laughing in his easy chair'

of Mr. Pope. The caricature of his filth and zanyism show how fully he both knew and felt the danger in which he stood. I could write a treatise in praise of the moral elevation of Rabelais's work which would make the church stare and the conventicle groan, and yet would be the truth, and nothing but the truth. I class Rabelais with the great creative minds of the world—Shakespeare, Dante, Cervantes, and others." Nevertheless it is true that "Rabelais" is not quite proper for parlor literature, nor suitable for circulating libraries.

And now let us cross the channel, and come from the sixteenth to the seventeenth century. About the year 1638 there is residing at Norwich a doctor, some thirty years of age, busily engaged in laborious practice. London-born and Oxford-bred, he has increased his knowledge by travel and

study abroad, visiting in his journey Padua, Montpelier, and Leyden, receiving from the famous school of the last city his degree as "doctor of physicke." There has just issued from his pen, whether published surreptitiously or not it is needless to inquire, a book remarkable for its learning, its startling paradoxes, its subtile disquisitions, and a multiplicity of abstruse allusions, yet so informed with noble genius, and so decorated with poetic beauty, that it rises at once to a foremost place in the world's literature—a book destined soon to be translated into more than half a dozen different languages and to pass through more than a score of editions. That physician was Sir Thomas Browne; that book the *Religio Medici.* Listen to Taine's estimate of Sir Thomas:

"Let us conceive a kindred spirit to Shakespeare's, a scholar and an observer instead of an actor and a poet, who, in place of creating, is occupied in comprehending, but who, like Shakespeare, applies himself to living things, penetrates their internal structure, puts himself in communication with their actual laws, imprints in himself fervently and scrupulously the smallest details of their figure; who at the same time extends his penetrating surmises beyond the region of observation, discerns behind visible phenomena a world obscure yet sublime, and trembles with a kind of veneration before the vast, indistinct, but populous abyss on whose surface our little universe hangs quivering. Such a one is Sir Thomas Browne, a naturalist, a philosopher, a scholar, a physician, and a moralist, almost the last of the generation which produced Jeremy Taylor and Shakespeare. No thinker bears stronger witness to the wandering and inventive curiosity of the age. No writer has better displayed the brilliant and somber imagination of the North. No one has spoken with a more eloquent emotion of death, the vast night of forgetfulness, of the all-devouring pit of human vanity, which tries to create an immortality out of ephemeral glory or sculptured stones. No one has revealed in more glowing and original expres-

sions the poetic sap which flows through all the minds of the age."

Probably the "Religio Medici" had its origin as a protest against what Browne has termed the scandal of the medical profession, tersely expressed in the then familiar words, *Ubi tres medici duo athei.*

One of the most notable of his many other works—for he was a prolific writer—was on "Urn-burial," the occasion of which was the discovery of some ancient urns in Norfolk. In this he treats with his usual learning of the funeral-rites of the ancient nations, and exhibits their various treatment of the dead. The following eloquent passage, contrasting Pagan speculation as to the future of the soul with Christian knowledge, occurs:

"All or most apprehensions rested in opinions of some future being, which, ignorantly or coldly believed, begat those perverted conceptions, ceremonies, sayings which Christians pity or laugh at. Happy are they which live not in that disadvantage of time, when men could say little for futurity but from reason, whereby the noblest minds fell often upon doubtful deaths and melancholy dissolutions. With these hopes Socrates warmed his doubtful spirits against the cold potion; and Cato, before he durst give the fatal stroke, spent part of the night in reading the Immortality of Plato, thereby confirming his wavering hand unto the animosity of that attempt. It is the heaviest stone that melancholy can throw at man to tell him he is at the end of his nature, or that there is no further state to come unto which this seems progressional, and otherwise made in vain. Without this accomplishment the natural expectation and desire of such a state were but a fallacy in nature. Unsatisfied considerators would quarrel at the justice of their constitution, and rest content that Adam had fallen lower, whereby, by knowing no other original and deeper ignorance of themselves, they might have enjoyed the happiness of inferior creatures, who in tranquillity

possess their constitutions, as having not the apprehension to deplore their own natures; and being framed below the circumference of these hopes or cognition of better things, the wisdom of God has necessitated their contentment. But the superior ingredient and obscured part of ourselves, whereto all present felicities afford no resting contentment, will be able at last to tell us we are more than our present selves, and evacuate such hopes in the fruition of their own accomplishments."

The following extract is from *Religio Medici:* "Now, for my life, it is a miracle of thirty years, which to relate were not a history, but a piece of poetry, and would sound to common ears like a fable. For the world, I count it not an inn but a hospital, and a place not to live but to die in. The world that I regard is myself — it is the microcosm of my own frame that I cast mine eye on; for the other, I use it but like my globe, and turn it round sometimes for my recreation. Men that look upon my outside, perusing only my condition and fortunes, do err in my altitude, for I am above Atlas's shoulders. The earth is a point not only in respect of the heavens above us, but of that heavenly and celestial part within us. That mass of flesh that circumscribes me limits not my mind. That surface that tells the heavens it hath an end can not persuade me I have any. I take my circle to be above three hundred and sixty. Though the number of the arc do measure my body, it comprehendeth not my mind. While I study to find how I am a microcosm, or little world, I find myself something more than the great. There is surely a piece of divinity in us, something that was before the elements, and owes no homage unto the sun. Nature tells me I am the image of God, as well as Scripture. He that understands not thus much hath not his introduction or first lesson, and is yet to begin the alphabet of man."

Did time permit, other extracts might well be given. His "Common-place Book," written for the instruction of his eldest son, Edward, abounds in illustrations of his curious learning,

of his active and speculative mind. This son Edward, by the way, became an eminent physician in London. He was for a long time president of the College of Physicians, and physician to Charles II.; the King remarking "that he was as learned as any of the college, and as well-bred as any of the court."

Two passages from this "Common-place Book" permit me to quote, the one for the benefit of any anti-phlebotomist who wishes to sustain his cause by an argument mellow with age, the other to show that doctors may become saints. The first of these is: "Since there be two major remedies in physic, bleeding and purging, which thereof deserves the pre-eminency; since the whole nation of the Chinese use no phlebotomy, and many other nations sparingly, but all some kind of purgative evacuation; and since, besides in man, there are so few hints for bleeding in any natural attempt in horses, cows, dogs, birds, or other creatures." The second extract is this: "Though in point of devotion and piety physicians do meet with common obloquy, yet in the Roman calendar we find no less than twenty-nine saints and martyrs of that profession."

His letters written to his son while studying in Europe contain many judicious instructions and other matters of interest. In one he advises him when traveling to "always have some physicke treatise to read often, lest this varietie of objects unsettle the notions of it." Again he writes him to bring home "a box of the Jesuits' powder in the bark and not in powder;" an expression which, bating the obvious Hibernicism, hints that adulterations of Calisaya were commenced quite early in the history of its European use.

I wish I could read you Sir Thomas's "Essay on Dreams," which commences with a sad eloquence: "Half our days we pass in the shadow of the earth, and the brother of death exacteth a third part of our lives." Further on a little quaint humor flashes out upon the somber picture: "Physicians will

tell us that some food makes turbulent, some gives quiet dreams. Cato, who doted upon cabbage, might find the crude effects thereof in his sleep. Pythagoras might have had calmer sleeps if he had totally abstained from beans. Even Daniel, the great interpreter of dreams, in his leguminous diet seems to have chosen no advantageous food for quiet sleep, according to Greek physic."

Yet we can not linger longer even amid the rich or curious treasures of this great man's mind; nor will time permit the introduction of other celebrated names, and a due consideration of their contributions to literature. I have not spoken of Sir Henry Halford, who beguiled the tedium of his professional rides by translating choice passages from English poets into Latin; nor of Sir Benjamin Brodie, who devoted the evening of his days to the discussion of psychological problems; nor of our own Benjamin Rush, the peer of any of the great men of his age in this or in any country, and probably, take him all in all, the greatest of American physicians; nor of the gifted Godman, whose brilliant mind irradiated every field of science or of literature it traversed; nor of living literary celebrities, who, while not renouncing their devotion to Esculapius, have shed new glory upon the medical name.

There are many reasons commending studies in literature and philosophy to physicians. A German physician explained the great object of disease to be to secure the intellectual and moral training of such noble men as doctors; diseases were made for doctors. And an excellent English divine, in his discourses upon the "Reasonableness and Certainty of the Christian Religion," answering those who thought there were other habitable worlds besides this earth, or else the stars would shine to but little purpose, suggests that one of their uses is to occupy the wits of many men in all ages in considering their end and nature, and calculating their distances and motions, whose curiosity might otherwise be very ill

employed—the heavens a sort of play-ground for the human mind, to keep it out of mischief. Now I will not, after a similar manner, assert that literature and philosophy were designed especially for the exercise of the medical mind—an arena in which doctors may become intellectual athletes. Nevertheless our minds will be quickened for the investigation of disease by occasional studies in other departments of knowledge; the simple change in the objects of thought will enable us to return to the first with increased power. A distinguished German, Dr. Simon, has said, "For literature and philosophy can alone sufficiently prepare the understanding and heart of man for the study of a science so difficult and perilous as medicine."

Another reason for such studies is given by Dr. Anstie in these words: "The power of commanding the sympathy of a number of patients in different ranks in life is absolutely necessary to considerable professional success; but it is impossible to do this simply by force of the most amiable disposition or the most genuine kind-heartedness. There must be the power of intellectual communion with many different minds, and this can be only gained by a varied intellectual training. It would be absurd to say that the most diligent study of mere technical matters could atone for deficiency in an acquaintance with such important subjects as mental philosophy, the principal events in the history of our race, and the chief developments of its theology, literature, and fine arts. The neglect of such accomplishments as these will account for very much of the ill success of individual medical men, and the undeservedly low social status of the whole profession."

Such studies as we suggest will enable the medical man to become just in reason, clear in thought and expression—matter and form will be enhanced in value. This is so obvious a result that comment is needless. As the inheritors of past ages, as participating the glory which predecessors have con-

ferred upon medicine, and as members of a learned and liberal profession, we are to exalt it in our own exaltation. And again, and at any rate, each one who loves literary pursuits will be enabled to say with an eminent man, "I have found literature its own exceeding great reward." Each one loving philosophic study will be ready to exclaim in the words of Milton:

> "How charming is divine philosophy!
> Not harsh and crabbed, as dull fools suppose,
> But musical as is Apollo's lute,
> And a perpetual feast of nectar'd sweets
> Where no crude surfeit reigns."

ON CEREBRO-SPINAL MENINGITIS.

BY H. F. KALFUS, M. D.

Cerebro-spinal meningitis is at this time a subject of unusual interest to the profession. The obscurity resting upon the cause and the treatment of the disease, its wide prevalence in our country, and the great mortality attending it every where give it an importance that attaches now to few other complaints. No plan of cure has been adopted generally by practitioners, but all that pertains to its treatment is unsettled and unsatisfactory. Under these circumstances I can not suppose that reports of cases of the disease will be deemed superfluous. The following, which occurred in my practice, I submit as the basis of some remarks on the subject, trusting that my professional brethren in districts where the malady has prevailed will favor the profession with histories of other cases.

Case I. George A., aged nineteen years, short, heavy-set, in a most vigorous state of health, in fact in physical development a perfect athlete, complexion fair, hair light, occupation brakeman on railroad, was attacked suddenly with chilliness

and hot flashes on the evening of December 7, 1872. The weather at the time was intensely cold, and he experienced his first symptoms while on a freight-train, going at brisk speed, just after he had been engaged in violent and protracted physical exertion, and was bathed in a profuse perspiration. He reached the city about dark, made his way to his boarding-house, very drowsy; complained of intense headache; went to bed in his clothing; could not be roused, but spent a restless night in this condition. I saw him on the morning of the 8th, and in addition to the above symptoms found him with considerable fever, face flushed, skin dry and hot, temperature 100°, tongue dry, pupils contracted, great photophobia—so great that he could scarcely be induced to open his eyes, and after opening closed them immediately; great restlessness; almost constant jactitation; spasms, attended with opisthotonos, so frequent and so violent that he could not be kept in a supine position; deep sopor approximating coma. He could be roused with difficulty long enough to get even monosyllabic answers to questions bawled in his ear, when he would speedily lapse into his former condition. Pulse 100, hard, small, quick; fullness of abdomen and distension of bladder; occasional retching; groaned and cried out frequently as if in intense agony; protruded his tongue in a difficult and unsteady manner; deglutition very difficult, almost producing convulsions at every effort, showing that the functions of the glossal, hypoglossal, and glossopharyngeal nerves were very seriously impaired. There were neither sudamina, herpes, vibices, nor any hæmic spots or other eruption at any time during the attack. The symptoms grew rapidly worse, with occasional amelioration for a short time, till the patient died, comatose, on the evening of the 10th, seemingly asphyxiated, his face being purple, livid, and mottled.

Case II. Male, aged twelve years, with strong hereditary tendency to neurotic trouble, active, slender but stout. This case, though presenting much the same train of symptoms,

was much milder in form than No. 1. The patient was attacked March 1, 1873, while at school, with drowsiness and general languor, and being unable to study quit school and went to bed. He made no special complaint during the first day and night, but simply wished to be let alone that he might lie down and sleep. He was excessively restless, tossing about the bed continually; irregular twitching, and sometimes rapid and violent motion of his arms. He frequently cried out as if in pain, and rolled his head from side to side. He had complete aphonia for four days; pupils contracted; slight photophobia; some subsultus and twitching of facial muscles; surface cool, 96°; pulse small and rather hard, but never exceeding 80; bowels torpid and mind sluggish, but no delirium. When pressure was made over the lower cervical and upper dorsal vertebræ, the patient would wince and sometimes complain of its giving him pain. Appetite good, but act of deglutition attended with some difficulty; urine passed voluntarily and in unusually large quantities; slight tendency at times to opisthotonos; no retching or vomiting. The symptoms all gradually improved, and the patient was convalescent on the eighth day of the attack, though he continued for a time to have some irregular movements of the hands and head, such as is observed in chorea.

The foregoing cases, though similar in many respects, present certain features diametrically opposite to each other. One terminated fatally, the other recovered; one was sthenic, while the other belonged to the asthenic variety; one was seemingly induced by exposure to cold, while the other had no appreciable exciting cause.

The treatment in both was as follows. In the first case cold applications were made to the head and nape of neck. Active catharsis was then set up with calomel and podophyllin, aided by large terebinthinate enemata. The bladder was emptied by the catheter, after which I gave drachm-doses of bromide of potassium, with antimonial wine, at intervals

varying from two to four hours, as the patient's ability to swallow permitted. The violence of the spasms was controlled by the inhalation of chloroform. Cups were applied to the temples and back of the neck, and the spine was blistered throughout the whole cervical and a portion of dorsal region. In addition the patient took a table-spoonful of liq. morphia every three or four hours. In case No. 2, the appetite being good and at times even ravenous, I permitted a liberal and nutritious diet and mild stimulants—eggs, egg-nog, and milk-punch—and gave half-grain doses sulphate of zinc and one-eighth to one-fourth-grain doses morphia, in f. ex. cimicifuga, every three or four hours. I blistered the cervical region and applied cold to the head, preceding all this by a brisk cathartic.

In the first case the symptoms were active and highly febrile. The exposure had produced a violent inflammation of the meninges of the cerebro-spinal cavities, and death ensued from congestion at the base of the brain and upper portion of the spine. It was a sporadic sthenic case of local inflammation, as manifest as if it had resulted in pleuritis or peritonitis, and as justly entitling it to a place among the local phlegmasiæ as if it had located itself in any of the other tissues of the body.

The second case I conceive to have been one of spontaneous subacute inflammation of the cranial and spinal membranes, especially of the cervical portion of the spine, as indicated by the constant tendency to opisthotonos and the pain and wincing under even slight pressure. One marked and unusual symptom was the aphonia which I had not previously observed in any case I had seen. Now to the questions—

1. What is cerebro-spinal meningitis?

2. Wherein does the epidemic form differ, if at all, from the sporadic variety?

3. What is the mode of its propagation in the epidemic form?

I reply that clearly it is not a regular idiopathic fever, but a local inflammation, and should be classed among the local phlegmasiæ as certainly as any other local inflammation. Further, that it is not an eruptive or exanthematous fever, because the eruption is by no means a constant or uniform symptom; nor is it a malarious fever, because it does not resemble affections of that class in its prodromata, manner of invasion, progress, or termination, and in many cases is not attended with any febrile symptoms at all. It is not a typhus or a typhoid fever, because it is equally free from the points of resemblance either in symptoms, progress, duration, course, or sequelæ. Nor does it affect the crowded, noisome lanes of cities more than the healthful and salubrious rural districts, and because it prevails in winter rather than in summer, and has no regular course; and when fever is present the temperature is much lower than in typhus or typhoid, and there is no hemorrhagic tendency as in these fevers. I might have said, as a further argument against its belonging to the exanthematous fevers, that in nearly half the cases there is no sign of any eruption, and when present it varies greatly in different cases. *Spotted fever* then I conceive to be a misnomer, and conveys no definite or correct idea of the disease.

As to the difference between sporadic and epidemic cerebro-spinal meningitis, it is more in degree than in kind. In the first there is usually more febrile disturbance, a higher temperature, and more constant and violent convulsive movements; in short, it is more sthenic in its course and more rapid in its termination.

As to the third question (the morbific agent which propagates it), I confess my utter inability to answer it. Dr. Aitkin defines the disease to be "a malignant epidemic fever, of an acute specific character, of sudden invasion, attended by painful contraction of the muscles of the neck and retraction of the head," etc. This definition, it will be perceived, is based upon the assumption that it is a fever *sui generis*, idiopathic in its

nature and essence; which is very questionable. Dr. Lidell, in his recent and most excellent treatise on apoplexy and its kindred diseases, says, in speaking of epidemic cerebro-spinal meningitis: "Our positive knowledge of this malady is remarkably scanty and incomplete; but at the same time much information of value concerning it, which is negative in character, has been collected; such, for example, as that it is not a variety of typhus nor typhoid nor malarial fever, nor a result of poisoning in any form by the so-called marsh-miasm; that it does not depend for its production upon any other known miasm, and that its spread is not due to contagion. Furthermore all attempts to explain the origin of the numerous and varied epidemics of it which have from time to time prevailed, or to bring them within the circle of the laws that apply to the propagation and development of diseases belonging to the zymotic classes in general, have signally failed." He says furthermore: "It now seems clear to me, and proven beyond reasonable doubt, that epidemic cerebro-spinal meningitis is not an idiopathic fever; for, in the first place, febrile movement does not constitute an essential part of its symptomatology. It may and often does run its whole course without presenting any febrile symptoms whatever." Niemeyer, who is excellent authority on this subject, says, "In epidemic cerebro-spinal meningitis the fever and all the other symptoms depend solely on the local disease."

Lidell arrives at the following conclusions: "1. That febrile symptoms do not necessarily belong to epidemic cerebro-spinal meningitis as a substantive disease; 2. That when fever is present it is generally but moderate in severity, and has no regular course; 3. That the post-mortem appearances are constantly those of an extensive inflammation of the cerebro-spinal meninges; 4. That epidemic cerebro-spinal meningitis is by nature *not* an idiopathic, primary, or essential fever, but a local phlegmasia, upon which the fever (when present) and all the other symptoms solely depend."

This disease has a great partiality for the young and the athletic. The official report of cases which have occurred in New York City in the years 1867–8–9 show that out of one hundred and eight fatal cases the subjects of sixty-nine were under five years of age, eight under ten, eleven under twenty, ten between twenty and forty years, four from forty to fifty years, and four from fifty to eighty years of age. Winter is its favorite season of prevalence. Out of one hundred and eighty-two European epidemics one hundred and eighteen occurred between October and March, and sixty-four from April to September. In Sweden, of four hundred and seventeen outbreaks, three hundred and eleven were in winter and one hundred and six in summer. Burdon Sanderson thinks that "severe cold is a very powerful predisposing cause."

Fortunately this severe disease is not contagious. As a further evidence that extreme cold is an important factor in its propagation, of the six hundred and ninety-one deaths occurring in New York City from March to November of last year, four hundred and nine of them occurred between March 23d and June 1st, and two hundred and twenty-one from June to August, and only sixty-one from August to November.

Treatment. Not being conversant with the special causal indications of this disease, we can not ward off or protect communities by the use of prophylactic measures. The fact (as we have assumed and attempted to prove) that it is a local phlegmasia, and not an idiopathic or essentially a febrile disease, will to a great extent determine our treatment. If a fever with definite course, it is evident we ought not to attempt to arrest, but guide and palliate; but if an inflammation, a different and more vigorous course is manifestly proper; first, to arrest the inflammatory process, and next, to remove (if we can not prevent) its consequences, which are uniformly serous or purulent exudations within or upon the cerebral or spinal membranes, or both. Cold applications to the head and spine, the ice directly or in bladders or cloths, seem to meet the first

indication. This, I believe, is almost uniformly approved, at least by John Hughes Bennett, Lidell, and other very excellent authority. Leeches to the neck, spine, and temples, before and behind the ears, and wet cupping in these localities, and local depletion, especially in those sthenic cases where the delirium is high or coma threatening or present, I deem valuable means. Active catharsis with saline refrigerants, large mercurial doses, assisted by active enemata, and even croton-oil, should not be omitted. Githens says "a few wet cups to temples and neck relieved *uniformly* the headache." Burdon Sanderson and Radcliffe approve of ice-bags to the head and spine the first day, keeping the extremities warm by artificial means if much prostration ensues. Prof. Lidell also adds his indorsement, saying that "cold is a most valuable means of subduing the inflammation." Opium and its preparations are valuable. It is indorsed by Valleix, Minor, Tulley, Broussais, and W. H. Draper, and seems to exert the same effect in this disease as in other serous inflammations, such as peritonitis, pleuritis, etc. One grain of opium, or one eighth or one fourth grain of sulph. morphia, should be given every two or three hours; and if deglutition is difficult, the one sixteenth or one eighth grain of morphia may be administered hypodermically. Lidell says "the use of opium has not been overestimated." Chloroform may be given if the convulsions are severe and not controlled by the opiates. Quinia exerts little or no influence on the disease, and I should not use it save in well-marked malarious districts, or where there seemed to be a marked tendency to intermissions in the fever when present. In those milder and non-febrile cases I adopt a course similar to the one above—the cold less violent and moderately applied, opium or morphia in smaller doses and less frequently, counter-irritation of occipital and spinal regions by rubifacients and stimulant embrocations, with even gentle stimulation by milk-punch and egg-nog and wine, or nitrous ether, which of course I would deprecate in the actively febrile cases.

In both forms a generous diet should be recommended, especially in the asthenic and mild cases, and if desired by the patient. As to the indiscriminate use of active cathartics I have some doubts. They may possibly be injurious by producing or aggravating spinal irritation, if the statement of Lallemand be true, that irritation of the gastric or enteric mucous membrane is propagated to the spinal cord through the medium of the ganglial nerves communicating with the roots of the spinal. The mild cathartics are to be preferred.

LOUISVILLE.

VESICO-VAGINAL FISTULA FOR THE RELIEF OF CHRONIC CYSTITIS.

BY PHILO E. JONES, M. D.

Mrs. V., aged forty-three years, came to me in February of the present year, asking treatment for what she called "trouble in passing water." From her history I learned that she has suffered from cystitis for the past three years, during which time she has received constitutional treatment from a number of physicians without experiencing the least benefit. In addition to the vesical trouble she has chronic cervical metritis with ulceration; also pulmonary tuberculosis of two years' standing.

Of course, with this amount of disease, she was greatly emaciated and not really able to be about. I ordered her to bed, and commenced the treatment by applying the necessary local remedies to the cervix uteri, and undertook to use warm-water and anodyne injections into the bladder; but in this I signally failed. On the introduction of the catheter it was found to pass but a *very* short distance beyond the internal meatus, and when effort was made to pass it further extreme pain was produced. Upon using the syringe I could inject

but about one ounce of water, when extreme vesical tenesmus followed, with the forcible ejection of all in the bladder. A strong solution of morphine produced the same effects. These efforts were continued, every other day, for some time; but failing to produce any relief, and the bladder not tolerating these measures so well as when commenced, I abandoned them entirely. The patient was now unable to be off her bed, but insisted upon being raised to urinate, which was as often as every five minutes, and accompanied with the most excruciating pain.

Having read the article of Dr. Parvin published in the Clinic, November 4, 1871, and that of Dr. Emmet in the American Practitioner, February, 1872, I decided to follow out the course of treatment therein advised, basing my conclusions upon the statement of Dr. Emmet that "even under the more unfavorable circumstances the risk of the operation is justifiable; life may be prolonged and a great degree of comfort obtained in allaying the persistent efforts to empty the bladder;" well knowing at the same time that in this case it could afford only temporary relief, as the patient must very soon die of consumption. After stating the facts to both husband and patient, and both requesting the operation, on the 4th of April, in company with Dr. D. W. Hollister, I performed it in the following manner.

The patient being under the influence of chloroform, and lying upon the back, the knees drawn up, and a bivalve speculum in the vagina, a female catheter, somewhat abruptly curved, was introduced through the urethra. This was now held by my assistant, with its point firmly pressing in the median line against the base of the bladder, just beyond the vesical meatus. I then with a scalpel divided the parts directly on the joint of the catheter until it could be passed through into the vagina. With the catheter remaining in the opening as a guide, the blunt blade of a pair of scissors was passed alongside into the bladder, and an incision nearly an inch in

length was made directly backward in the median line. The walls of the bladder were now found to be greatly thickened and contracted, and the finger passed into the cavity could very readily detect the ulcerated condition of the inner surface. The bladder was now to be washed out once or twice daily with a large amount of warm water injected through the vesico-vaginal opening, the finger also to be introduced through the opening every day to prevent its closure.

My patient was now entirely free from pain without the use of anodynes, in which condition she remained one week, when she died by asphyxia. With the *results* of this operation I am abundantly satisfied, it having relieved this poor woman of one week's suffering, which could not be obtained from the largest doses of morphine.

WAUSEON, OHIO.

ON LESIONS OF THE CÆCUM.

BY F. B. MORRIS, M. D.

An acute inflammation confined to the cæcum is said by some authors to be of frequent occurrence, by others to occur rarely. My own experience does not enable me to decide the question; but having had in my practice a few well-marked cases of disorder of the cæcum, I propose to discuss briefly a few points in relation to these lesions.

Lesions of the cæcum and appendix vermiformis present many peculiarities which are worthy of special consideration. By reference to the anatomy of the cæcum we can readily distinguish the several particulars in which it differs from any other portion of the large intestine. The semi-feculent materials in passing from the ilium are retained in the cæcum for the purpose of undergoing some necessary action. This bowel, there can be no doubt, is the seat of an important

part of the digestive process, appropriating any remaining nutritious elements, absorbing their watery parts, or eliminating some excrementitious matter from the system. This view of its function is confirmed by the rich vascular and glandular distribution observed in the walls of this portion of the intestinal canal.

Thus we see in the anatomical character and physiological relations of the cæcum strong predisposing causes to morbid action. Some writers make a distinct disease of inflammation of the cæcum and its appendix under the name of typhlitis, or peri-typhlitis when it extends to the neighboring cellular tissue. Typhlitis may be idiopathic, and arise from an ordinary exciting cause. The principal causes of this affection are irritating articles of diet, indigestible food, blows, gunshot wounds, sudden and violent straining, or foreign bodies and intestinal concretions. The strumous diathesis is not a frequent predisposing cause of lesions of the cæcum, but when it exists there is a greater tendency in the case to run on to ulceration and perforation. The majority of cases of typhlitis or peri-typhlitis without perforation occur in subjects under the age of twenty-five years, and those of ulceration and perforation occur in persons advanced in years.

Occupation involving sedentary habits may be regarded as a predisposing cause of this disease. The majority of cases of lesions of the cæcum occur in male subjects.

Pain and tenderness in the right iliac region, attended with symptoms of obstruction, sometimes with muco-feculent diarrhea, and occasionally an aching sensation in the lumbar region, are the characteristic symptoms of the complaint. Tumefaction over the seat of the lesion, with more or less hardness, can usually be detected, and when confined to the intestine alone is generally well defined; but when inflammation of the external areolar tissue is added it is apt to be somewhat diffuse. On percussion the swelling is more or less tympanitic, and on pressure yields a gaseous and crepi-

tant feel to the hand. When the intestine alone is involved the tumor yields a dull sound on percussion, indicating that the cæcum is filled with solid matter, due either to an accumulation of hardened fæces or to a mass of undigested solids taken into the stomach.

Inflammatory lesion of the cæcum and its appendix may terminate by resolution, or by suppuration with perforation, favoring the discharge of pus and fecal matter into the abdominal cavity, causing general peritonitis and death; or the abscess may point toward the abdominal surface, usually in the right iliac region, causing adhesions to be formed in such a manner as to justify an incision through the abdominal walls, and the evacuation of the offending matters. The following is a brief history of three cases which I have treated.

Case I. A German farmer, forty-five years of age, was attacked with diarrhea, and complained of soreness in the right lumbar region, which gradually increased until I was called, three days after the patient was taken ill. I found him in great distress. The diarrhea ceased in a few hours after the attack, leaving the bowels constipated; abdomen tympanitic, with considerable pain, mostly in the region of the cæcum, which was increased by pressure. He had been vomiting several hours before I was called. Pulse feeble, and the whole surface wet with perspiration. On examination I detected considerable tumefaction in the cæcal region, which yielded a dull sound on percussion. After a thorough manipulation nothing was discovered in the bowel but impacted fæces. I gave opiates and had warm fomentations of hops applied over the whole abdomen.

Next day found patient considerably relieved; no vomiting; complained still of pain in the region of the cæcum, but the tumefaction was somewhat diminished and softened. Applied the stethoscope over the cæcum, and could hear gases hissing through the ilio-cæcal valve. Ordered free

injections of warm water, continued the hop fomentations, and gave calomel, opium, and ipecac.

Found the patient next day considerably relieved, having had several copious discharges from the bowels; tumefaction entirely gone; considerable soreness about the cæcum on pressure. Gave mass. hydrarg., grs. xij; ipecac, pulv. opii, each grs. ij; to be made into pills xij. Gave one every two hours, and after all were taken gave a full dose of sulphate of magnesia. In the next twelve hours the bowels were freely moved, and no further treatment was required; but an irritating plaster was ordered over the whole right iliac and lumbar region for a week, when the patient had entirely recovered.

Case II. A boy, eighteen years of age, was attacked with symptoms of an ordinary remittent fever. Complained of a dull pain in the right lumbar region; torpid liver; tongue coated, with a dry, red streak in the center. Gave calomel, quinia, chlorate of potash, and ipecac, with directions to bathe the parts complained of with turpentine. Called next day and found no improvement, only that the tongue was more clean and moist. Gave sulphate of magnesia, which operated in six hours, carrying off a large quantity of vitiated matter. The pain over the cæcum remaining about the same, I applied a fly-blister, which gave but temporary relief. Ordered quinia, chlorate of potash, and Dover's powder. On examining the seat of pain found a circumscribed hardness, with a slight elevation, in the region of the cæcum. Ordered a warm fomentation of hops and corn-meal to be constantly applied.

Three days from this time I discovered a sac of matter pointing to the surface of the abdomen; fluctuation distinct, and upon making pressure around the sac could perceive a crepitant feeling, indicating gas confined in the areolar tissue. Patient was considerably emaciated, and symptoms of pyæmia well marked. Gave beef-tea, chlorate of potash, quinine, and iron. Bowels, being regular, required no attention. The case

was clearly one of abscess of the cæcum and its appendix; and, feeling satisfied that adhesions had formed, I cut down to the abscess, at the first incision letting out a large quantity of fetid gas. I then passed a probe into the cut, and with its point could distinctly feel the sac. Withdrawing the probe, I passed a grooved director in its place, then followed the track of the groove with a bistoury, and on coming in contact with the sac punctured it; and the result was a free discharge of pus of a dark greenish-yellow cast and some fecal matter. The discharges continued free for eight days, during which time my patient improved rapidly, and in a week more went to work on a farm regardless of a fistulous opening. After pus ceased to be discharged a limpid fluid occasionally escaped from the fistula; and one day, while plowing, a smarting, pricking sensation was felt at the mouth of the fistula, when, on trying to ascertain the cause, a concrete substance was found, about as large as an orange-seed, which proved to be a fish-bone surrounded with calcareous matter. After this was extracted the fistula closed up and gave my patient no further trouble.

Case III. A young woman, eighteen years of age, had complained for several days of a dull pain in the right iliac region, and an occasional sharp, shooting pain, with nausea and vomiting. On first seeing the case I found the patient in great distress, vomiting stercoraceous matter, and my first impression was that a strangulated hernia existed. A thorough examination failed to detect a hernia, but showed the real seat of the trouble to be in the region of the cæcum. The bowels had not been moved for three days; the abdomen was distended and tympanitic. Administered free injections, but to no purpose, except to empty the colon, which afforded some relief. Gave, besides bicarbonate of soda, morphia and ipecac, and applied a sinapism over the epigastrium. In twelve hours, when I called, found the vomiting had ceased, but the distress in the region of the cæcum was about the

same; applied a fly-blister. Called again in twenty-four hours, and found no change in the condition of patient. From the symptoms I diagnosed it a case of peri-typhlitis, with an abscess involving the cæcum and the ilio-cæcal valve. Gave chlorate of potash, quinia, and Dover's powder; also directed a poultice of corn-meal and stramonium-leaves to cover the whole abdomen; and as the stomach could not retain any thing but the medicine, I ordered beef-tea and egg-nog to be given by enema, and, when indicated, fifteen to twenty drops of tincture opii to be added. The symptoms continued the same for three days and nights, during which there was no change in the treatment. During the time the kidneys were sufficiently active, the urine being in reasonable quantity and high-colored. Repeated examinations had been made by palpation and auscultation. On the fourth day I could hear, by the aid of the stethoscope, intestinal gas hissing through the ilio-cæcal valve.

The case was so plain to me by this time that I did not hesitate to assure the friends of the patient that the abscess was discharging into the colon, and that it would not be long before the bowels would move freely; and I accordingly desired that every evacuation should be set aside in separate vessels for my inspection.

I called the next morning early, and was informed that the patient had had eight evacuations, which entirely relieved the distension of the abdomen. The first evacuation consisted of the injected materials and a small quantity of fæces. The second was copious and very offensive, and contained a large amount of pus, together with a small quantity of blood. Elixir of calisaya and iron were given with a generous diet, occasionally prompting the action of the liver. My patient recovered rapidly, and in twenty days from the time of my first visit was free from every sign of intestinal disturbance.

Milville, Butler County, Ohio.

Reviews.

Wohler's Outlines of Organic Chemistry. By RUDOLPH FETTIG, Ph. D., etc. Translated from the eighth German edition, with additions by IRA REINSON, M. D., Ph. D., Professor of Chemistry and Physics in Williams College, Massachusetts. Philadelphia: Henry C. Lea. 1873.

It is a sign of the times to see a work of this size, intended for practical use, devoted to organic chemistry only. This division of the science has made vast strides in a few years. By torturing in every conceivable way the already numberless compounds of carbon, substances have been extracted precious to medicine and the arts. German students have been the chief inquisitors, and it is fitting that to them we should go for the latest information. It is in this field that American chemistry has been lagging. The rich results of experiment gathered in Wöhler's outlines will stimulate as well as enlighten those of us engaged in chemical research. The wall of separation between inorganic and organic chemistry, erected half a century ago and jealously guarded for many years, has been broken down. The nomenclature and notation of the two have been made to harmonize according to a system more perfect than that of any other science. It is a matter of doubt if ophthalmology itself can show names more expressive or more puzzling to the neophyte than many that meet the eye in solid letters every where in the book before us. Here is something to roll as a sweet morsel under the tongue, "Dimethylpseudopropylcarbinol." Think of a lecturer wrestling with this sesquipedal word, "Isodiglycolethylenic acid," before he can properly signify one of the

products of milk-sugar, that in the old regime went "trippingly on the tongue" as lactonic acid.

The book is well adapted to its purpose, the various parts being orderly classified and the crooked paths made as straight as their labyrinthine nature will allow. A treasury of dry facts and formulas invaluable to a laboratory, it makes rather dull reading for the practitioner. J. W. H.

Contributions to Mental Pathology. By I. Ray, M. D., Author of Medical Jurisprudence of Insanity, and Mental Hygiene. Boston: Little, Brown & Co. 1873.

At a time when insanity is exciting so deep an interest in the public mind on account of its increasing frequency, and not less because it is so often made a plea in our courts of justice for the commission of crime, any contribution which enlarges our knowledge of the subject will prove acceptable to the profession. It may be that insanity is often plead falsely, and that criminals have escaped just punishment upon that plea; but Dr. Ray makes it painfully evident that in some instances raving maniacs have suffered the extreme penalty of the law, when an educated court and intelligent jury would have committed them to a lunatic asylum. It is bad that feigned insanity should screen criminals, but assuredly it is worse to hang irresponsible lunatics. The question of lunacy is one about which medical men are every day called to give their opinions, and the study of mental pathology therefore becomes a professional necessity.

Some of the subjects discussed in the volume before us are the causes of insanity, its statistics, doubtful recoveries, delusions and hallucinations, confinement of the insane, the law of insanity in criminal cases, the trial of Rogers, the trial of Baker, medical experts.

The trial of Baker has a melancholy interest for medical men. He was a physician of Kentucky, a graduate of the Medical Institute of Louisville, a gentleman of education and refinement. He was tried for the murder of his brother-in-law, Bates, and found guilty and executed, notwithstanding proof which ought to have satisfied any sane mind that he was a monomaniac. The medical profession of the state united in a petition to the governor to pardon him on the ground of his insanity, but such was the popular frenzy at the time that the voice of science and humanity was unheard. Dr. Ray gives utterance to some words of just indignation in view of the facts of this sad case, and in taking leave of it expresses the hope "that no similar one will ever be permitted again to disgrace our country and the age."

Every chapter in this book will be read with interest by members of both the professions which have the adjudication of such cases. We are glad that Dr. Ray has collected his various papers relating to insanity, scattered through many publications, and presented them in this neat and attractive volume.

Text-Book of Physiology: General, Special, and Practical. By John Hughes Bennett, M. D., F. R. S. E., Professor of the Institutes of Medicine, etc., in the University of Edinburgh. Philadelphia: J. B. Lippincott & Co. 1873.

This work is truly what it purports to be—a text-book for students of medicine who have not leisure during their attendance on lectures to study the more elaborate treatises on physiology. But the reader is not to infer from this that it is a mere outline of the science. On the contrary, it contains a very full account of all the functions of the human system, and the reader who has mastered its details will be in possession of a very satisfactory amount of physiological

knowledge. We are not sure that it is not upon the whole the best among all the excellent text-books on physiology, admirable as are many of its predecessors, European and American. It is another of the numerous evidences of a growing taste in our country for the study of medical *science* that our publishers find it profitable to bring out so many works on physiology and the cognate branches of medicine, which by the mere routine practitioner have been so generally undervalued.

His work is divided into three parts. In the first he considers general physiology, the molecular elements, the cell elements, the physical properties of the tissues, etc. In the second the various functions of the body are treated of, and the third is devoted to practical physiology, by which is meant the causing of the student himself to perform with appropriate instruments the investigations necessary for reaching exact results. He embraces in it practical physiological chemistry, practical histological physiolgy, and practical experimental physiology. Processes are given for the analysis of the blood, lymph, saliva, bile, urine, and the solids of the body. The microscope is described, and directions are given how to observe with this instrument and how to prepare tissues for observation.

It is not probable that a very great number of our students will apply themselves at once to the prosecution of physiology by these methods, but the day is coming when such investigators will find encouragement. And indeed we should think students would find few things more interesting than mingling experimental research and observations with the microscope with the study of books. In such a course of investigation the work of Dr. Bennett will be found a satisfactory guide.

[The want of space obliges us to omit several reviews, which will appear in the next number.—Eds. Am. Prac.]

Clinic of the Month.

THE OLEATE OF MERCURY IN SYPHILIS. — Berkeley Hill, Esq., Surgeon to University College Hospital, London, states (Pract.) that he has recently employed the oleate of mercury in a large number of cases, with the following results:

"In the first place, if continuously applied, it quickly produces the usual effects of mercury on the system, and if used in sufficient quantity causes salivation. Secondly, it is apt, in delicate, fair-skinned persons, to excite violent, smarting pain, which, though rarely lasting more than half an hour, if so much, is enough to disgust them with the remedy. The irritation may even cause erythema and slight vesication, though I have never seen any more serious local effect than this. To avoid these undesirable occurrences, Mr. Marshall has devised three preparations of different strengths, containing twenty, ten, and five per cent. of peroxide of mercury respectively.* To the weakest dilution ten per cent. of morphia as oleate of that base is added, to allay the irritation from the mercury and assuage the local pain of inflammation when used for affections of that kind.

"With one or other of these preparations the application of this form of mercury can be continued on even very sensitive skins. When used for inunction, instead of the gray ointment, about a scruple or half a drachm of the twenty-per-cent. jelly should be rubbed gently into the flank until it is absorbed by the skin, which occurs in about eight or ten minutes, leaving the skin almost dry and not greasy. This may be repeated once or twice in twenty-four hours, of course

* *Vide* American Practitioner, March, 1873.

changing the site of the inunction each time. The anointed part may be washed next day without fear. This quantity usually causes swelling and slight soreness of the gums in a week if anointed once a day, and in four days if applied twice daily. Before using the stronger solution it is well to test the skin with the weaker form, lest too energetic application of the oleate should cause painful irritation and trouble. But I have found the ten-per-cent. solution most useful as an adjuvant to the ordinary treatment by iodide of potash internally, or for persons whose stomachs do not bear mercury well. For example, in cases of leproid or tubercular eruptions, relapsing after disappearing more than once, this form of mixed treatment is usually very successful.

"The great advantage of the oleate over any other form of mercury, when externally applied, lies in the rapidity of its absorption, which makes it very serviceable as a kind of cosmetic; that is, to paint over syphilitic papules or stains in the face or other exposed parts. For this purpose I direct the patient to rub into the spots themselves, night and morning, a little of the twenty-per-cent. solution with the tip of the finger, the usual treatment being continued at the same time. It is remarkable to observe how rapidly the papules sink down and grow pale when the oleate is directly applied to them. If the twenty-per-cent. is too stimulating, the weaker ones may be employed, though their effect is less satisfactory. Again, the oleates are very useful in fissures of the fingers about the nails or in the palms. Rubbing the ten-per-cent. or, if there is much soreness, the five-per-cent. solution with morphia into the fingers at night, and sleeping in wash-leather gloves, is a very effectual way of healing these troublesome affections. By day the cracks should be well closed by court-plaster and plastic collodion, and gloves worn out of doors.

"I have not had much success with the oleate in non-syphilitic affections, but I have not tried it extensively. It has proved a very effective parasiticide for pediculi, as its

penetaating power enables it to diffuse itself thoroughly over the scalp and pubis. I have also used it to inflamed joints as a controllant of inflammatory action, but I have not perceived any clear benefit to be derived from its use in such cases. In syphilitic affections the oleate is most serviceable, being a certain and less disagreeable cutaneous application than ointments, and really hastening the subsidence of papules and other disfigurements of exposed parts of the skin."

Treatment of Colles's Fracture.—Dr. Alexander Macdonald *(ibid.)* quotes various authorities to show that the seat of the fracture is about an inch above the styloid process, and generally transverse; occasionally, however, presenting some degree of obliquity in its course either downward and inward or downward and outward. He then proceeds to point out that the radius presents a normal curvature anteriorly, that the direction of its carpal extremity is forward and inward, and that the difference in length between its anterior and posterior surfaces amounts on an average to half an inch. On the occurrence of the accident the following results appear: the natural concavity of the radius is lost; its distal extremity, with the carpus attached (in consequence of the unopposed action of the supinator and long extensors), is carried backward, outward, and upward, while the length of the bone anteriorly is augmented in a ratio corresponding to the interval between the fragments, and the interosseous space is diminished by the approximation of the upper fragment toward the ulna by the pronator quadratus. The points to be attended to in the treatment are, first, to restore the form of the radius; second, to bring back its carpal extremity to its proper aspect *forward and inward;* and third (as a consequence of the preceding steps), to remove the obstacles to the reunion of the opposed surfaces, and, if possible, secure the normal length of the bone before and behind. How difficult of accomplishment this last point is may be inferred

from Dr. R. W. Smith's testimony, that out of twenty cases of fracture of the lower end of the radius in none had the normal length been restored; in all the anterior surface exceeded the posterior. Dr. Macdonald thinks that the several desiderata above mentioned have been met by the apparatus known as Gordon's splint, in which the normal curve of the bone is taken as a guide, and the radius thereby forced to assume its proper form and relations, while the carpal surface is directed downward, the hand being moderately adducted and midway between pronation and supination. Finally they are easy of application, and the feeling of comfort experienced from the support thereby afforded is marked when contrasted with any other form of splint in ordinary use.

Precautions against Venous Hemorrhage in Tracheotomy.—Dr. Frederick Betz, of Heilbronn, in his *Memorabilien*, observes *(ibid.)* that venous hemorrhage constitutes one of the most fatal occurrences in tracheotomy. It may occur either before or after the incision into the trachea. If it occur before, it may be arrested by the application of the sesquichloride of iron, by transfixion of the vessel and the application of a ligature, or still better, by the rapid introduction of the canula and the re-establishment of the respiration. In like manner, if the hemorrhage occur after the incision into the trachea, the insertion of the canula is the best and indeed the only means of stopping the bleeding. There are cases, however, in which, notwithstanding the canula has been skillfully inserted, hemorrhage continues simply because the child makes no inspiration, but remains in a state of spastic expiration. In such condition respiration should be excited by blowing air through the canula. Dr. Betz has performed fifteen tracheotomies in croup, with six recoveries. In one case the child died on the table from asphyxia, but in a similar case which occurred subsequently recovery took place by practicing the above maneuver. The great distension of

the cervical veins during expiration is well known, and the hemorrhage if a vein be wounded is then very free. On this account Dr. Betz recommends that the incisions should be made as far as possible during inspiration.

Treatment of Epicanthus.—Professor H. Knapp, M. D., of New York, sums up, in the third volume of the Archives of Ophthalmology and Otology, his experience on this subject as follows:

"Epicanthus of a higher degree, which does not diminish or disappear during the first four or five years of life, is not likely to do so later in life, and should be removed by operation. The operative procedures which attack the integumental fold itself are apt to fail, as the subsequent cicatricial contraction frequently produces relapses. Von Ammon's rhinorrhaphy—removal of a rhomboidal piece of skin from the root of the nose, and uniting the edges with sutures—is a reliable method for the removal of epicanthus. We must endeavor to obtain union by first intention, on account of the disfiguring scars which are left on the back of the nose when suppuration ensues. To obtain primary union the excision of skin should be done carefully, the adjacent skin undermined without any bruising, and the wound well united by delicate and closely-set sutures. Strapping with court-plaster may help to diminish the tension of the skin. During the first days after the operation great care is to be recommended, lest by restlessness of the patient or some accident a separation of the wound ensue, the consequence of which would be a bad-looking scar."

New Anæsthetics.—Dr. B. W. Richardson has just introduced to the profession a methylene ether, consisting of the compound radical ethyl combined with bichloride of methylene. It has a fluid density of 1.000, and its boiling-point is 84° F. Lighter than chloroform, it is more readily expelled

from the system, and in the dental and ophthalmic cases in which it has been successfully employed it has left no injurious effects behind.

Another new ether is that just discovered by Mr. George Archbold. Of the two thousand and odd ethers it is the lightest known. Its specific gravity is .680—little more than half that of water—and its boiling-point is 73° F. *Par excellence*, the "light ether," as it is called, consists of four atoms of carbon, ten of hydrogen, and one of oxygen. As compared with hydrogen its vapor density is 36. From its highly light, volatile, and inflammable nature, caution is required in its manufacture. The temperature of the human body suffices to make it boil violently, as may easily be tested by putting a small quantity of it on the head. It has been tried in several surgical cases, and with the most gratifying results. (London Lancet.)

Hysteria.—Dr. Anstie has recently published in the London Lancet a series of most interesting lectures on this subject, from the last of which we extract the following:

"'Hysteria,' most unhappily, has become fixedly connected in the vulgar mind with the idea of sham; and under the influence of this notion real dangers are often overlooked, and a miserably inefficient plan of treatment is adopted. Such cases as the following are not unfrequent. A young woman, somewhat deficient in robustness of constitution, but of energetic mind and self-sacrificing benevolence, without a trace of the hysteric feebleness of will, is called by virtue of these very qualities to be the servant and helper of a whole family. Her life is consumed with burdensome trifles, and perhaps her hopes of marriage are frustrated by the mere fact that she has no time to think of her own interests. Nevertheless she bears up well and does her work cheerfully until some physical illness attacks her. It is then that the accumulated influences of her past life begin to tell seriously. Instead

of making a complete recovery she remains, after the acute illness has passed away, in a state of great general depression, and now by degrees hysteric phenomena begin to develop themselves. The will, which was once so energetic, falls into abeyance; and the patient's sympathies, which once went freely out to those around her, are morbidly drawn inward to the contemplation of her own indefinite but most real miseries. There is not a single phenomenon of the whole hysteric tribe which may not be produced by such a train of circumstances; and I do not know a more melancholy or disagreeable spectacle than is afforded by the thoughtless injustice with which the friends of such a person will often at once confound her case with that of girls who have been pampered into hysteria by mere idleness and luxury acting upon a naturally feeble will. It is of deep moment to medical men that they should never share in such a mistake, which is not merely disgraceful in itself, but may produce the most disastrous results. So far is hysteria, developed under such circumstances, from being a trivial or simply tedious malady, that it is often the expression of a state of vital enfeeblement which may be the precursor of rapidly fatal organic disease. More especially it is likely to be followed by pulmonary consumption, under which the system will quickly succumb, if there be any hereditary tendency to that disease. One of the most pressing difficulties in these cases of hysteria from exhaustion is the almost total failure of appetite and digestion with which we have to contend. In many instances we find it nearly impossible to devise a scheme of nutrition which shall prevent the patient sinking lower, still less that shall restore her wasted strength; yet, unless we can encompass this object, we shall not prevent a fatal result, or, at any rate, a most lingering illness. In commencing the treatment it will scarcely be necessary to insist on perfect repose of body, for the patient's strength is visibly unequal to the slightest efforts; but it may be most needful to impress on the friends

the uselessness and mischief of foolish attempts to 'rouse' her, which they are too apt to make. Having secured this object, our whole attention must for a time be directed to the task of improving nutrition by a skillfully assorted diet. On this subject it is impossible to lay down rigid rules, for repeated experiments can alone decide the kind of food which will best be accepted and tolerated. Two main principles should be borne in mind: first, not to force too large a quantity of nourishment on the stomach at once; and second, never to allow too long an interval to elapse without feeding, more especially at night, or rather in those early morning hours when the powers of life are naturally at the lowest ebb. It is not possible in these cases to limit so strictly either the quantity or the times of administration of stimulants as in other forms of hysteria; still it is best, as far as may be, to give a fixed quantity of wine, in divided portions, along with some other food, and to reserve the use of brandy for positive fainting, or very serious failure of the pulse. We may sometimes aid the restoration of stomach-power by bitter tonics, of which the best perhaps is strychnia, in doses of one fortieth of a grain, combined with dilute mineral acid, or forty to sixty-minim doses of Easton's syrup of iron, strychnia, and quinine. An important subsidiary matter is that of keeping up the heat of the extremities by artificial means, if necessary. As soon as ever the stomach will bear it, cod-liver oil or Devonshire cream should be administered, or a useful formula in some cases is the old-fashioned rum-and-milk given in the early morning. The procuring of sleep is sometimes a very delicate and difficult matter. As far as possible it should be effected by the administration of food and a little wine rather than by the use of any decided narcotic. Of the latter remedies, however, the combination of bromide of potassium (fifteen grains) and extract of hemp (half a grain) is perhaps the least objectionable. You must wait for a considerable restoration of strength before submitting the patient

to the fatigue of a journey; yet, as soon as this can be borne, her removal to a bracing atmosphere (sea-side or high table-land) will be likely to do great good.

"Let me pass now to the treatment of quite the opposite class of hysteric patients; those, namely, in whom hysteria is mainly the expression of an inherited neurotic temperament, distinguished by natural feebleness of volition and self-control. In such patients the explosion of positive hysteria may be brought about by the veriest trifle, but is most commonly the result of the organic disturbance induced by the advent of puberty. In these cases, if we see them early enough, it is of comparatively little moment what special direction the phenomenon may take—whether the tendency be toward the ordinary 'fits,' or to weakness of one or more limbs, or to the development of somnambulism or catalepsy, etc. Of such subsidiary measures as the careful prevention of constipation and the insistance on the limitation of the hours of sleep, the avoidance of too heavy bedclothes, and so forth, I have already spoken. The two main points which should engage our attention are the strengthening of enfeebled volition and the elaborate exercise of muscular co-ordination. In attempting to train the will to a higher degree of efficiency there are several ways in which we may go to work. The first and most absolutely important measure is to remove the patient from the atmosphere of injudicious sympathy with which she is too commonly surrounded; yet even this must be done with great judgment. It would be very foolish to fly to the other extreme—of unkind harshness. What we above all things need is a kind but thoroughly business-like and unsentimental domestic management. It is but rarely that this is to be found in the patient's own family; and I entirely agree with the opinion of Mr. Carter, indorsed by that of Dr. Reynolds, that the first requisite in cases of any severity is removal from home influences and familiar surroundings to the care of some person of decidedly superior intelligence

and experience in the domestic management of such patients. It is extremely surprising to see the vast improvement which this single measure, without any other specific treatment, will often effect; but such good influence may be indefinitely strengthened if those who have domestic charge of the patient possess the tact and ability to rouse in her the feelings of emulation, especially that kind of emulation which is blended with the desire to do good to others. I can not enter here upon the complicated considerations which arise with respect to moral education. It is enough if I hint that the influence of noble example rather than elaborate sermonizing is likely to be useful; and that no good whatever is likely to result from an emotional cultivation of the spiritual nature, since the natural tendency of this in feeble minds is toward concentration of the thoughts upon self, the very thing which we wish to avoid.

"In cases where the apathy of volition is extreme we may have to take into consideration the propriety of adopting some of those measures of *surprise* which operate through the production of mental shock. This is a far more delicate question than is sometimes thoughtlessly supposed. To hear many persons talk one would suppose that it was only necessary to submit these hysteric patients to a severe course of shower-baths, or to hurt them a good deal with an electric machine, in order to place them in a way of rapid recovery. I beg you to dismiss all such crude ideas from your minds. The nervous surprise effected by the shower-bath is good only when and in so far as it arouses the skin circulation to reaction, just as would be the case in persons who are not hysterical; and the use of electricity at all as a mere terror or punishment is a pure barbarism. It is only when some of those definite lesions of sensation or of muscular movement already specified exist that we can hope for any good from electricity; and, on the other hand, its ill-timed use has many times done the greatest mischief. And if we turn to

those great impressions which have sometimes been effected by powerful moral shocks, it must be owned that we see but little to encourage us in the hope that these can be beneficial, except when they occur spontaneously, and even then it may be doubted whether they are not as often mischievous as useful.

"Not to dwell on the obvious fact that an adequate amount of bodily exercise is highly necessary to a good state of nutrition and strength, I must insist on some more exact details of management. Mere monotonous walking exercise, though never so punctually taken, goes for very little. It is most desirable that the muscular system should be trained in an elaborate and varied manner. You will perhaps think that such accomplishments as singing and pianoforte-playing should have been mentioned, if at all, under the head of mental training; but in truth the sustained attention necessary to produce the accurate co-ordinated movements which these exercises require is most directly useful to the nervous health. The training, however, ought to be severe and complete, and by no means directed to the cheap acquirement of a trumpery accomplishment, which may just serve for display. The same thing may be said of dancing. The most varied figures and steps should be thoroughly taught, without reference to prevailing fashion, but with great insistance upon elegant completeness. Where these more expensive luxuries are out of reach, a great deal may yet be done by trained movements of the arms with dumb-bells and clubs, and of the legs by the use of the skipping-rope; and at any rate a kind of dancing, rude in every thing but in an accurate following of the rhythm of music, may always be taught. Of horse exercise, unluckily out of the reach of the multitude, it is useless to give any recommendations. A finer training, both of the muscular and nervous system, and also of those qualities of courage and vigilance which are so opposed to hysteric languor, it is impossible to imagine. One more exercise we may name,

which will be perhaps more available for the many in future than at present, is swimming. Where the bodily vigor is sufficient it would be difficult to mention any kind of training which is more likely to exert a beneficial influence in counteracting the disposition to hysteric feebleness and languor. Let me warn you finally against the common mistake of urging any of these physical exercises to the extent of severe fatigue. You would thus disgust and enervate rather than brace the nervous and moral tone of your patient."

On Hypodermic and Parenchymatous Injections of Alcohol and similar substances.—In a paper with the above title (Virchow's Archiv., vol. lvi, 1872) Schwalbe endeavors to confirm the opinion which he had already put forward that the effect of injections of tincture of iodine into the substance of a goiter depends principally upon the alcohol of the preparation. He tried simple alcohol injections with other tumors, and reports a case of lipoma which was reduced in size by such injections, in consequence of the formation of cicatricial tissue which they induced in it. The results also which are obtained by the subcutaneous injection of ergotine for aneurism and varicocele are referred by Schwalbe to the circumstance that the drug is used in such cases in an alcoholic solution with glycerine. In consequence of this, inflammation with subsequent cicatricial formation takes place, and thus a compression and obliteration of the dilated vessels is brought about. *(Centralblatt f. d. Med. Wissensch.)*

Notes and Queries.

THE AMERICAN MEDICAL ASSOCIATION.—The twenty-fourth annual meeting of this body was held in St. Louis, beginning May 6th and continuing four days. A very cordial welcome, on the part of the physicians of St. Louis, was delivered by Dr. John S. Moore; after which the president, Dr. Thos. M. Logan, of California, delivered the customary annual address. This, having been already published in pamphlet-form, has probably reached most of our readers. The scientific business of the Association was confined to the sections, where a great deal of profitable work was done, the larger part of which will appear in the Transactions. The efficiency of the sections will, it is thought, be much improved in future by a resolution which secures stenographic reports of the discussions.

REPORTS ON MEDICAL EDUCATION.

Dr. Carson, of Ohio, chairman, read a brief but interesting report on this subject. He set forth the general dissatisfaction among the profession on the subject. He defined two classes of influences reacting on medical education, the external and the internal; of all of which it may be said that they are the products of growth under certain definite and adherent impulses, with power of adaptive modification. This Association can exert great influence by increasing its efficiency as a tribunal before which subjects may be brought for the exercise of that most potent influence, *discussion*, and not for that impotent purpose of expecting to exercise legislative functions toward the teaching bodies. The report was referred to the Committee on Publication.

A second report on medical education was made by a special committee, Dr. Pollock, of Pittsburgh, chairman, of which the following abstract contains the leading points:

"The committee appointed by the president at the last meeting of the Association to take into consideration the propriety of adopting the suggestions of the Committee on Medical Education are fully impressed with the importance of the subject, and acknowledge the value of the suggestions offered. But we believe it wholly impracticable to carry into operation any law which does not meet the hearty approval of diverse interests connected with the teaching and practice of medicine; and while we have no doubt that this Association has grown to be a power in the profession, felt and recognized by all, yet to make this power effective its decisions should be calm and deliberate. Therefore your committee, after due deliberation, have concluded to recommend the adoption of the conclusion of the report of the Committee on Medical Education, which is as follows: That a congress, composed of two members from each state and territory, and one from each recognized medical college, all to be members of this Association, be appointed (or nominated by the nominating committee) at this present session; that said committee, or congress, shall meet three days previous at our next annual meeting; and that said committee, or congress, shall perfect a plan for some uniform system of medical teaching, which when adopted by the Association shall be the only recognized method of medical teaching in the United States."

The report was laid on the table.

REPORT ON MEDICAL LITERATURE.

The chairman of the committee, Dr. Austin Flint, of New York, not finding time to prepare the report, had requested Dr. L. P. Yandell, of Louisville, to assume his duties. Dr. L. P. Yandell, jr., read the report. He referred to the fact that for years the profession in America had depended entirely on the medical literature of England and the European continent. Now the medical journals published in America are ahead of the combined medical publications of England and France. This remarkable growth must be gratifying to the pride of every American physician. Going back only a quarter

of a century, and our country was nearly destitute of original works on medicine, almost entirely dependent upon European surgeons and physicians for instruction. Now we are independent of the world. Our own authors can supply all text-books required by the medical student and the practitioner; and for clearness and fullness of information on all practical points they compare most favorably with the best writings of our brethren abroad. Dr. Yandell then discussed at length the medical journalism of America. Over forty medical journals are now published in the United States. The report was referred to the Committee on Publication.

THE MEDICAL CORPS OF THE ARMY.

Dr. Woodward, Assistant Surgeon U. S. A., read a communication from a large number of medical officers in the army asking that the medical staff of the army be placed on an equal footing with the other staff corps of the army as regards rank, pay, etc. Dr. D. W. Yandell said he would gladly second the attempt to secure our brethren in the army what they wished provided the term "rebel prisons" named in the memorial be changed to "Confederate prisons." This being cheerfully done, the measure was carried, and a committee appointed to memorialize Congress on the subject.

NATIONAL SANITARY BUREAU.

The subject of a national sanitary bureau was brought up by Dr. Bell, of Brooklyn, N. Y., in the following resolutions:

"Resolved, that in the judgment of this Association the establishment of a national sanitary bureau, with relations to the General Government similar to those of the Bureaus of Agriculture and Education, is highly desirable as a means of promoting sanitary science and the protection of the public health.

"Resolved, that this Association request of the United States Educational Bureau to so extend the scope of its inquiry as to include vital diseases and mortuary statistics in relation to local, meteorological, and geological influences, and to disseminate the information so collected throughout the country."

The resolutions of Dr. Bell were, on motion, referred to the Committee on State Medicine and Public Hygiene. There was a decided disposition to table these, as had been done with resolutions almost similar when offered at Philadelphia, and but for the deserved popularity of the distinguished gentleman who offered them they unquestionably would have been. As it was, they were referred to the Committee on State Medicine. The Association is unmistakably averse to any official connection with the Government.

AMENDMENTS TO THE CONSTITUTION.

Dr. Davis, of Chicago, proposed the following amendments to the constitution:

"The delegates shall receive their appointments from permanently organized state medical societies, and such county and district medical societies as are recognized by representation in their respective state societies, and from the medical department of the army and navy of the United States."

"Each state, county, and district medical society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number. The medical staffs of the army and navy shall be entitled to four delegates each."

CODE OF ETHICS.

Dr. Brodie, of Detroit, proposed that a committee of one from each state be appointed, whose duty it shall be to revise the Code of Ethics, and report at the next annual meeting; but at the suggestion of Dr. Woodward the subject was referred to the Judicial Committee.

Dr. Howard, of Baltimore, proposed that hereafter the several executive officers of the Association be nominated by the Judicial Council and elected by vote on a general ticket. These several amendments were laid over under the rule for one year. The feeling seemed to be general that they would be adopted at the next meeting.

AMERICAN AND FOREIGN WINTER CURES.

Dr. H. R. Storer, now residing at Mentone, on the Mediterranean, for the benefit of his health, and who had been giving his attention to the subject of climatology, was appointed a committee to inquire into and make a report on the relative advantages of American and foreign winter cures.

PRIZE ESSAYS.

Dr. John S. Moore, of St. Louis, chairman of the committee, announced that only one such production had been received, and it was not deemed worthy of any of the prizes offered.

ELECTION OF OFFICERS.

The chairman of the Committee on Nominations, Dr. Johnson, of St. Louis, submitted the following partial report:

"Your committee suggest the following gentlemen for the various offices named:

President—Dr. J. M. Toner, District of Columbia.
First Vice-president—W. Y. Gadbury, of Mississippi.
Second Vice-president—J. M. Keller, of Kentucky.
Third Vice-president—W. C. Husted, of Missouri.
Fourth Vice-president—L. D. Warner, of Massachusetts.
Treasurer—Dr. Casper Wistar, of Philadelphia.
Librarian—William Lee.
Committee on Libraries—Johnson Elliott.
Secretary—Theodore A. McGraw."

Detroit was named for the next annual meeting of the Association.

CHAIRMEN AND SECRETARIES OF SECTIONS FOR 1874.

1. *Practice of Medicine, Materia Medica, and Physiology*—Dr. N. S. Davis, of Chicago, chairman; and Dr. Frothingham, of Ann Arbor, Mich., secretary.

2. *Obstetrics and Diseases of Women and Children*—Dr. Theo. Parvin, of Indianapolis, chairman; and Dr. Montrose A. Pallen, of St. Louis, secretary.

3. *Surgery and Anatomy*—Dr. S. D. Gross, of Philadelphia, chairman; and Dr. Alonzo Garcilon, of Maine, secretary.

4. *Medical Jurisprudence, Chemistry, and Psychology*—Dr. A. N Talley, of South Carolina, chairman; and Dr. E. L. Howard, of Maryland, secretary.

5. *State and Public Hygiene*—Dr. A. N. Bell, of Brooklyn, chairman; and Dr. A. D. Stuart, of Winona, Minn., secretary.

JUDICIAL COMMITTEE.

Three years—Dr. Brodie, of Michigan; Dr. N. S. Davis, of Illinois; Dr. E. L. Howard, of Maryland; Dr. William O. Baldwin, of Alabama; Dr. Dean, of New York; Dr. J. P. Logan, of Georgia.

Two years—Dr. L. S. Joynes, of Virginia; Dr. R. N. Todd, of Indiana; Dr. Askew, of Delaware; Dr. J. E. Morgan, District of Columbia; Dr. Daniel Lillie, of New Jersey; Dr. S. M. Benham, of Pennsylvania; Dr. Dunlap, of Connecticut.

One year—Dr. Bartlett, of Wisconsin; Dr. Powell, of Illinois; Dr. Gale, of Kentucky; Dr. Moses, of Missouri; Dr. Hughs, of Iowa; Dr. Bemiss, of Louisiana; Dr. Cheever, of Massachusetts.

DEATH FROM CHLOROFORM.—The following letter from Dr. Galt, one of the most intellectual physicians of Louisville, gives the history of another of those casualties which have to be set down to the account of chloroform:

To the Editors of the American Practitioner:

On the 10th of this month (May) I was requested by a gentleman to administer chloroform to his brother-in-law for the extraction of a tooth. The patient was a remarkably handsome, well-grown lad, twelve years of age, seemingly in robust health. As I am always reluctant to give the anæsthetic for dental surgery, I tried to dissuade him from taking chloroform; but, as the operation threatened to be of a very painful character, the tooth being carious and broken off below the gum, he insisted upon its use. I accordingly accompanied him to the office of Dr. C. E. Dunn, a most excellent and skillful dentist. I gave the chloroform on a napkin, holding it sufficiently far from his nose to admit of the free inhalation of atmospheric air; but before coming under its influence the

youth became nauseated, and threw up the contents of his stomach, composed principally of pieces of apple which he had eaten during the morning. After waiting for the nausea to subside I resumed the administration of the chloroform, and brought him slowly and cautiously under its influence; not desiring to produce profound anæsthesia, but simply to take away the sense of pain which would necessarily accompany the operation. Dr. Dunn then proceeded to extract the tooth, and succeeded in removing one of the roots. The patient struggled a little, and complained that he felt the pain of the extraction. I then gave him a little more chloroform, his brother-in-law held his hands, and Dr. Dunn resumed the operation. I kept my finger on the temporal artery while supporting his head, and watched his breathing closely.

Simultaneously with the extraction of the remainder of the tooth I felt the artery flicker, and perceived a sudden pallor and change of expression in his countenance. We all noticed this change, and immediately lifted him from the chair, holding him with his head down and feet elevated at an angle of forty-five degrees; but seeing no change I laid him on the floor and pulled his tongue forward with a tenaculum, and Dr. Dunn applied ammonia to his nostrils. He responded immediately with a deep, long inspiration, which he repeated several times under the effects of the ammonia and the cold douche. After taking ten or twelve of these deep, sighing inspirations he ceased to breathe; and, though I used Dr. Marshall Hall's method of artificial respiration for several minutes, I never succeeded in arousing the action of the heart Dr. Dunn very promptly brought a bellows, with which we carefully inflated his lungs, alternately filling and emptying them. This artificial respiration was kept up for some time, but his heart had ceased to beat. I sent in for Dr. Cummins, whose office is next door to that of Dr. Dunn, and he came very promptly, accompanied by Drs. Wible and Leachman. Dr. Cummins suggested the use of the galvanic

battery, and went hurriedly for it. Dr. Wible suggested the Marshall Hall method, but that I had already exhausted.

I have been told, since the occurrence of this unfortunate case, that the patient was suspected to be suffering from some heart trouble; but I have never been able to learn any thing sufficiently definite to justify any thing more than a *suspicion* that such might have been the case. He certainly did not present the appearance of one suffering with disease of the heart or of any other organ, but seemed to be enjoying robust health. I have deemed it my duty to report the case to the profession; and, having done so as plainly as I could, I have no speculations to offer in regard to the immediate cause of death. The amount of chloroform (Squibb's) used, including that inhaled prior to his vomiting, which was of course lost, was about half an ounce. He was never profoundly under its influence, and up to the time of the flickering of his pulse and his sudden pallor his breathing and pulse were natural. The former was never stertorous or labored; the latter was steady, regular, and full. No time was lost in the application of the means of resuscitation, as every thing was in reach, the bellows being in Dr. Dunn's laboratory. Dr. Dunn and the brother-in-law of the poor little fellow both assisted me with great promptness and presence of mind.

Respectfully yours,

W. H. Galt, M. D.